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Commission on Population and Development
Fiftieth session
3-7 April 2017
Item 2 of the provisional agenda
Adoption of the agenda and other organizational matters

Provisional agenda

1. Election of officers.
2. Adoption of the agenda and other organizational matters.
3. General debate:
   (a) Actions for the further implementation of the Programme of Action of the International Conference on Population and Development at the global, regional and national levels;
   (b) Special theme of the fiftieth session of the Commission[1] based on the Programme of Action of the International Conference on Population and Development and the key actions for its further implementation.
4. Programme implementation and future programme of work of the Secretariat in the field of population.
5. Provisional agenda for the fifty-first session of the Commission.
6. Adoption of the report of the Commission on its fiftieth session.

Annotations

1. Election of officers

Rule 15 of the rules of procedure of the functional commissions of the Economic and Social Council stipulates that the Commission shall elect, from among the representatives of its members, a Chair, one or more Vice-Chairs and such other officers as may be required.

[1] Changing population age structures and sustainable development.

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In accordance with Council decision 2005/213, the Commission, immediately following the closure of its forty-ninth session, held the first meeting of its fiftieth session for the sole purpose of electing the new Chair and other officers of the Commission. The Commission elected Alya Ahmed Saif Al-Thani (Qatar) as Chair and Eleonora van Munster (the Netherlands) as Vice Chair for the fiftieth session. At the second meeting of its fiftieth session, to be held on 3 April 2017, the Commission will elect the Vice-Chairs nominated by the groups of African States, Eastern European States and Latin American and Caribbean States.

The membership of the Commission at its fiftieth session is provided in the annex to the present document.

2. Adoption of the agenda and other organizational matters

Rule 7 of the rules of procedure of the functional commissions of the Economic and Social Council requires that the Commission shall, at the beginning of each session, adopt the agenda for that session on the basis of the provisional agenda.

On the recommendation of the Commission at its forty-ninth session, the Council, in its decision 2016/256 (see A/71/3, chap. X, sect. I.6), approved the provisional agenda and documentation for the fiftieth session of the Commission.

At its thirtieth session, the Commission decided to authorize its Bureau to hold intersessional meetings in preparation for its sessions on a yearly basis (see E/1997/25, para. 52). At its thirty-ninth session, in its resolution 2006/1 (see E/2006/25, chap. I.B), the Commission requested its Bureau to meet as frequently as necessary in preparation for its annual sessions.

Documentation

Provisional agenda (E/CN.9/2017/1)

Note by the Secretariat on the organization of work of the session (E/CN.9/2017/L.1)

3. General debate

(a) Actions for the further implementation of the Programme of Action of the International Conference on Population and Development at the global, regional and national levels

(b) Special theme of the fiftieth session of the Commission[1] based on the Programme of Action of the International Conference on Population and Development and the key actions for its further implementation

In its resolution 49/128, in which it endorsed the recommendations of the International Conference on Population and Development, the General Assembly decided that the Commission, as a functional commission assisting the Economic and Social Council, would monitor, review and assess the implementation of the Programme of Action of the Conference at the national, regional and international levels and advise the Council thereon.

At its twenty-first special session, the General Assembly, in its resolution S-21/2, adopted the key actions for the further implementation of the Programme of Action.

The General Assembly, in its resolution 65/234, extended the Programme of Action and the key actions for its further implementation beyond 2014.

On the basis of the recommendation made by the Commission at its forty-ninth session, the Economic and Social Council adopted resolution 2016/25 on the future organization and methods of work of the Commission. In the resolution, the Council reaffirmed the primary mandate of the Commission to monitor, review and assess the implementation of the Programme of Action at the national, regional and international levels and to advise the Council thereon; also reaffirmed the central role of the Commission in coordinating the review and assessment of the key actions for the further implementation of the Programme of Action, including addressing gaps and challenges to implementation; and affirmed that the Commission would contribute to the follow-up and review of the 2030 Agenda for Sustainable Development within its existing mandate, and that the contribution of the Commission should reflect the integrated nature of the Sustainable Development Goals, as well as their interlinkages.

In the terms of reference of the Commission (see E/1995/27, annex I, sect. I.A), which were endorsed by the Council in its resolution 1995/55, the Commission was called upon to adopt a topic-oriented and prioritized multi-year programme. That work programme would, inter alia, provide a framework for assessing the progress achieved in the implementation of the Programme of Action. In its report on its twenty-eighth session, of which the Council took note in its decision 1995/236, the Commission called for the preparation of annual reports on a selected topic of the Programme of Action (see E/1995/27, annex I, sect. III).

On the basis of the recommendation made by the Commission at its forty-ninth session, the Council, in its resolution 2016/25, decided that the Commission should continue its current practice of selecting one special theme for each annual session on the basis of progress, gaps, recurrent challenges and evolving issues relevant to population and development based on the Programme of Action and the key actions to accelerate its further implementation, while also taking into account the 2030 Agenda, with a view to fully implementing all of its mandated tasks and contributing to the work of the Council, including by building synergies and, in the context of its working methods, as appropriate, taking into account the annual thematic focus of the Council and of the high-level political forum on sustainable development under the auspices of the Council, in accordance with General Assembly resolutions 67/290 and 68/1, as part of a multi-year work programme. The Council also decided to include, under the item on the general debate, two sub-items, one focusing on actions for the further implementation of the Programme of Action at the global, regional and national levels and one focusing on the special theme of the Commission.

In its decision 2016/101 (see E/2016/25, chap. I.C), the Commission decided that the theme for its fiftieth session, in 2017, would be "Changing population age structures and sustainable development".

Documentation

Report of the Secretary-General on changing population age structures and sustainable development (E/CN.9/2017/2)

Report of the Secretary-General on the monitoring of population programmes, focusing on changing population age structures and sustainable development (E/CN.9/2017/3)

Report of the Secretary-General on the flow of financial resources for assisting in the further implementation of the Programme of Action of the International Conference on Population and Development (E/CN.9/2017/4)

4. Programme implementation and future programme of work of the Secretariat in the field of population

At its twenty-eighth session, the Commission suggested that the work programme in the field of population should continue, inter alia, to give high priority to the monitoring of population trends and policies and include the biennial preparation of estimates and projections of global, national, urban, rural and city populations; the conduct of studies on population and related development policies; the preparation of studies on interactions of population change with other development processes; the conduct of analyses of mortality; contribution to and coordination of in-depth studies on fertility, nuptiality and reproductive rights and health, including family planning; the conduct of studies to improve the understanding of the causes and consequences of internal migration and international migration; increasing public awareness of and information exchange on population and development issues; making the necessary arrangements for coordinating the review and appraisal of the Programme of Action; and the provision of technical cooperation support to developing countries, particularly the least developed countries, and, on a temporary basis, to countries with economies in transition in the light of the economic and social problems that those countries faced at that time (see E/1995/27, annex II). The Commission reaffirmed the content of the work programme at its twenty-ninth session (Commission resolution 1996/1, see E/1996/25, chap. I.C).

At its thirtieth session, the Commission stressed the importance of continuing the basic work of the Population Division of the Secretariat on the crucial underpinnings of population estimates and projections; basic population trends and issues, including fertility, mortality, migration and patterns of rural and urban population change; the evolution of population policies; and understanding of the links between population and development (Commission resolution 1997/3, see E/1997/25, chap. I.C). At its thirty-seventh session, the Commission reaffirmed the importance of the work of the Division in providing the United Nations system and the international community with comprehensive and scientifically sound inputs for the analysis of progress made in achieving the goals and objectives on population and development set in the outcomes of major United Nations summits and conferences, especially the Programme of Action of the International Conference on Population and Development, the key actions for its further implementation and the Declaration of Commitment on HIV/AIDS (Commission resolution 2004/1, see E/2004/25, chap. I.B). At the same session, the Commission further emphasized that the Division should continue its basic work on population estimates and projections; patterns of rural and urban population change; the analysis of international migration; the implications of the changing age structure of the population for development; the increasing diversity of fertility and mortality levels and trends; the interrelations among population, resources, the environment and development; and

the evolution of population policies, applying a gender perspective in this regard (Commission resolution 2004/1).

The Commission has before it the report of the Secretary-General on programme implementation and progress of work in the field of population in 2016 (E/CN.9/2017/5). Members of the Commission are invited to review the report and provide comments thereon.

As indicated in the proposed strategic framework for the period 2018-2019 (A/71/6 (Prog. 7)), the objective of the Organization under the subprogramme on population is to contribute to improved policy frameworks to effectively address current and emerging population issues and to integrate the population dimension into the international development agenda. Pursuant to paragraph 7.11 of the proposed strategic framework, the Population Division is the entity responsible for the subprogramme on population, the mandate of which is to be achieved by: (a) providing substantive support to United Nations bodies, especially the Commission on Population and Development, assessing progress made in the implementation of the Programme of Action of the International Conference on Population and Development and the achievement of the internationally agreed development goals, including the Sustainable Development Goals of the 2030 Agenda for Sustainable Development, and following up on the decision of the General Assembly to extend the Programme of Action beyond 2014; (b) facilitating the discussion of key or emerging population issues by experts or government representatives; (c) preparing comprehensive studies on population issues and trends relating to fertility, family planning, mortality, international and internal migration, urbanization, population growth, population ageing, population projections, population policy and population in relation to development; (d) disseminating population information and policy-relevant findings in the area of population through the Division's website; and (e) supporting capacity development to address population issues through workshops or the dissemination of technical material, such as manuals and software, in collaboration with other subprogrammes and entities in related areas.

The Commission has before it the draft programme of work of the Population Division for the biennium 2018-2019. Members of the Commission are invited to review the draft and provide comments thereon.

Documentation

Report of the Secretary-General on programme implementation and progress of work in the field of population in 2016: Population Division, Department of Economic and Social Affairs (E/CN.9/2017/5)

Note by the Secretariat on the draft programme of work for the period 2018-2019: subprogramme 5, Population, of programme 7, Economic and social affairs

5. Provisional agenda for the fifty-first session of the Commission

In accordance with rule 9 of the rules of procedure of the functional commissions of the Economic and Social Council, the Commission has before it the draft provisional agenda for its fifty-first session, together with an indication of the documents to be submitted under each item and the legislative authority for their

preparation, in order to enable the Commission to consider those documents from the point of view of their contribution to the work of the Commission and their urgency and relevance in the light of the current situation.

The attention of the Commission is drawn to Council resolutions 1979/41 and 1981/83 on the control and limitation of documentation. In addition, the Commission is reminded that the Council, in paragraph 1 (j) of its resolution 1982/50 on the revitalization of the Council, urged all its subsidiary bodies to exercise the utmost restraint in making requests of the Secretary-General for new reports and studies and to implement fully the provisions of the decisions of the Council and of the General Assembly with respect to the control and limitation of documentation.

The attention of the Commission is also drawn to paragraph 4 of the annex to Council resolution 1982/50, in which the Secretary-General recommended that: (a) the documentation and programme of work of the subsidiary bodies of the Council and the Assembly be streamlined in order to enable the subsidiary bodies to perform effectively the functions entrusted to them; (b) the Council and the Assembly continue to review the provisional agendas for their subsidiary bodies, together with the list of requested documentation, in order, inter alia, to establish greater consistency in the overall request for documentation and its orderly consideration at the intergovernmental level, taking fully into account the medium-term plan and the programme budget; and (c) in doing so, the Council and the Assembly also take into account the need for the consolidation of items and documentation for their subsidiary machinery.

Furthermore, in its resolution 1981/83, the Council instructed its subsidiary bodies to take urgent measures to streamline their agendas and programmes of work and to bring about a substantial reduction in their requests for documents, bearing in mind the duration and the cycles of their meetings, and to report to the Council on measures adopted, taking strictly into account the guidelines set forth in the pertinent resolutions and decisions of the Council and the Assembly.

In decision 1983/163, the Council requested the Secretary-General: (a) to bring to the attention of intergovernmental and expert bodies, before decisions were adopted, any request for documentation that exceeded the ability of the Secretariat to prepare and process on time and within its approved resources; and (b) to draw the attention of intergovernmental bodies to areas where duplication of documentation was likely to occur and/or where opportunities for integrating or consolidating documents that dealt with related or similar themes might exist, with a view to rationalizing documentation.

On the basis of the recommendation made by the Commission at its forty-ninth session, the Economic and Social Council, in its resolution 2016/25, decided to include, under the item on the general debate, two sub-items, one focusing on actions for the further implementation of the Programme of Action at the global, regional and national levels and one focusing on the special theme of the Commission. The proposed provisional agenda for the fifty-first session of the Commission reflects this change.

Documentation

Note by the Secretariat containing the provisional agenda for the fifty-first session of the Commission (E/CN.9/2017/L.2)

6. Adoption of the report of the Commission on its fiftieth session

In accordance with rule 37 of the rules of procedure of the functional commissions of the Economic and Social Council, the Commission shall submit a report to the Council on the work of each session.

Annex

Membership of the Commission on Population and Development at its fiftieth session (2017)

(47 members; four-year term)

	Term expires at close of session in the year
Argentina	2018
Bangladesh	2017
Belarus	2019
Belgium	2021
Benin	2018
Bolivia (Plurinational State of)	2019
Brazil	2021
Burundi	2019
Chad	2017
Chile	2020
China	2018
Denmark	2017
Dominican Republic	2018
Finland	2020
Germany	2018
Iran (Islamic Republic of)	2019
Iraq	2017
Israel	2019
Jamaica	2019
Liberia	2018
Madagascar	2021
Malaysia	2018
Mexico	2021
Mongolia	2018
Morocco	2020
Netherlands	2017
Nigeria	2017
Oman	2017
Pakistan	2018

	Term expires at close of session in the year
Peru	2018
Philippines	2019
Qatar	2020
Republic of Moldova	2020
Romania	2021
Russian Federation	2018
Serbia	2018
Sierra Leone	2019
South Africa	2018
Sudan	2020
Switzerland	2017
Turkmenistan	2020
Uganda	2020
United Kingdom of Great Britain and Northern Ireland	2018
United States of America	2018
Uruguay	2017
Zambia	2018

Note: At the 17th meeting of its 2016 session, on 5 April 2016, the Economic and Social Council elected the following eight Member States for a four-year term beginning at the first meeting of the fifty-first session of the Commission, in 2017, and expiring at the close of the fifty-fourth session, in 2021: Belgium, Brazil, Cameroon, Cuba, Japan, Madagascar, Mali and Mexico. The Council postponed the election of two members from Asia-Pacific States, one member from Eastern European States and three members from Western European and other States for a four-year term beginning at the first meeting of the fifty-first session of the Commission, in 2017, and expiring at the close of the fifty-fourth session, in 2021. The Council also elected Turkmenistan to fill an outstanding vacancy on the Commission for a term beginning on the date of election and expiring at the close of the forty-ninth session of the Commission, in 2016. The Council further postponed the election of one member from Latin American and Caribbean States, for a term beginning on the date of election and expiring at the close of the forty-ninth session of the Commission, in 2016, and one member from Western European and other States for a four-year term beginning on the first meeting of the fiftieth session, in 2017, and expiring at the close of the fifty-third session, in 2020 (see decision 2016/201 D).

At the 6th meeting of its 2016 session, on 8 December 2016, the Economic and Social Council elected France and Romania to fill outstanding vacancies on the Commission for a four-year term beginning at the first meeting of the fifty-first session of the Commission, in 2017, and expiring at the close of the fifty-fourth session, in 2021. The Council decided to further postpone the election of two members from Asia-Pacific States and two members from Western European and other States for a four-year term beginning at the first meeting of the fifty-first session of the Commission, in 2017, and expiring at the close of the fifty-fourth session, in 2021, and one member from Western European and other States beginning on the date of election and expiring at the close of the fifty-third session of the Commission, in 2020.

United Nations E/CN.9/2017/2

Economic and Social Council

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Commission on Population and Development
Fiftieth session
3-7 April 2017
Item 3 of the provisional agenda
General debate

Changing population age structures and sustainable development

Report of the Secretary-General

Summary

In its decision 2016/101 (see E/2016/25), the Commission on Population and Development decided that the special theme for its fiftieth session, in 2017, would be "Changing population age structures and sustainable development". The present report is intended to inform the Commission's deliberations on the theme, as part of the Commission's ongoing follow-up and review of chapter VI, on population growth and structure, of the Programme of Action of the International Conference on Population and Development, held in Cairo, in 1994.

The present report provides a review of the typical changes in the age distribution of the human population that are taking place both globally and across a wide range of countries and regions. Such changes, which are influenced by various social and economic factors, have important implications for sustainable development. The report also serves to document the key trends and international differences in changing age structures, and the critical role of population policies, and of policies related to health, education, employment and social protection, in managing the associated challenges and enhancing the potential social and economic benefits of such changes.

The report was prepared by the Population Division of the Department of Economic and Social Affairs of the United Nations.

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I. Introduction

1. A large majority of the world's countries are experiencing significant shifts in the distribution of their populations by age, moving from the youthful populations associated with the relatively high levels of fertility and mortality of the past, towards the older populations associated with the lower levels of fertility and mortality of recent times.

2. These changes are a manifestation of a demographic transition, characterized by long-term reductions in the mortality and fertility rates prevailing in a population, which brings important changes not only in the size of the population but also in its composition by age. In some cases, the age structure of a population is also affected by international migration, especially for countries with low levels of fertility that receive significant numbers of immigrants.[1]

3. As illustrated below, demographic transition is a universal phenomenon, even though its timing and speed have varied greatly across countries and regions. The resulting changes in the population age distribution and other associated demographic trends — including the postponement of marriage and childbearing to later ages, as well as changes in the size, composition and living arrangements of families — have important implications for the health and education of children and youth, for the size and productivity of the labour force, for the sustainability of financial transfer systems and for macroeconomic growth.

II. Changing population age structures

4. The demographic transition from a regime of high mortality and high fertility to one of low mortality and low fertility has direct effects on the population age distribution. The transition can be divided into three main phases. In the first phase, when mortality falls but fertility remains high, the age distribution shifts towards younger ages as the share of children[2] increases owing to the greater proportion of infants and children who survive through early childhood. In the second phase, fertility also begins to decline, reducing the number of children and youth as a proportion of the total population. Meanwhile, the proportion of adults in the prime ages for work and childbearing in the population begins to rise. During the third phase, if a lower level of fertility is maintained over many decades, the numbers of children, youth and working-age adults all decline as a proportion of the total, while the number and the proportion of older persons continues to rise.

5. The gradual shift from a younger to an older population age structure is encapsulated by the term "population ageing", which is often measured by the increase in the median age or in the proportion of older persons. There is great diversity internationally in the onset and speed of population ageing, which is most

[1] Since migrants in most situations tend to be younger on average than the population of the host society, immigration typically results in a population that is more youthful than it would have been otherwise.

[2] In the present report, unless otherwise noted, "children" are considered to be aged 0 to 14 years, "youth" are aged 15 to 24 years, the "working ages" are between 25 and 64 years, and "older persons" are aged 65 years or over.

advanced in Japan and most countries of Europe, which are now well into the third phase of the demographic transition. The populations of Australia, Canada, New Zealand and the United States of America have grown older as well. However, because of fertility levels that are not quite as low as those of Japan or Europe, combined with a steady influx of immigrants, those four countries are experiencing a slower process of population ageing. Most countries in Asia and in Latin America and the Caribbean are now in the middle or late phases of the transition. Fertility reductions in these regions have been rapid by historical standards, and therefore their populations are expected to age more rapidly than in Europe, Japan and other developed countries. Most countries of sub-Saharan Africa are either in the first stage of the demographic transition or have just entered the second phase; their populations are still relatively young. If fertility falls as anticipated in the African region, these countries will undergo a similar long-term process of population ageing over the next several decades.

6. Population ageing reflects one of the major achievements of humanity. Given the large increase in the proportion of children who survive to adulthood, couples can choose to bear the number of children they desire, with high levels of confidence that both the children and the mother will survive, eventually to advanced ages. The reduction of infant, child and maternal mortality and the promotion of reproductive health were major objectives of the Programme of Action of the International Conference on Population and Development. Later, these topics were featured as part of the Millennium Development Goals and have also been included within the 2030 Agenda for Sustainable Development and its Sustainable Development Goals. In turn, the resulting demographic changes, including those in the population age structure, generate a new set of opportunities and challenges for sustainable development.[1]

A. Global trends in population age structures

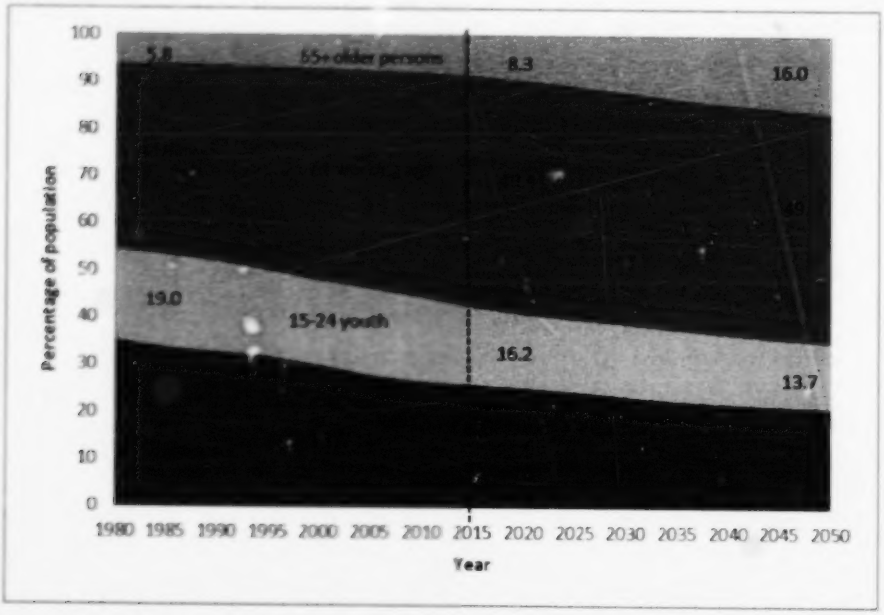
7. From 1980 to 2015, the proportion of children under the age of 15 in the global population fell from over one third to just over one quarter. It is projected to decline further to around one fifth soon after mid-century (see figure I). At the same time, although the share of older persons (persons) aged 65 years or over, was less than 6 per cent of the world's population in 1980, it represents more than 8 per cent of the total today and is expected to double to more than 16 per cent of the global population by 2050.

8. Although the global population of youth, aged 15 to 24 years, has been growing and now numbers around 1.2 billion, it is projected to fall slowly as a proportion of the total population, from a little over 16 per cent at present to less than 14 per cent in 2050. Following a gradual rise since 1980, the population in the working ages, from 25 to 64 years, is projected to remain stable as a proportion of the world's total population — just under one half — between now and the middle of the century.

[1] Guy J. Abel and others, "Meeting the Sustainable Development Goals leads to lower world population growth", *Proceedings of the National Academy of Sciences of the United States of America*, vol. 113, No. 50 (December 2016).

Figure I

Percentage distribution of global population by broad age group, from 1980 to 2050



Source: United Nations, *World Population Prospects: The 2015 Revision — Key Findings and Advance Tables*.

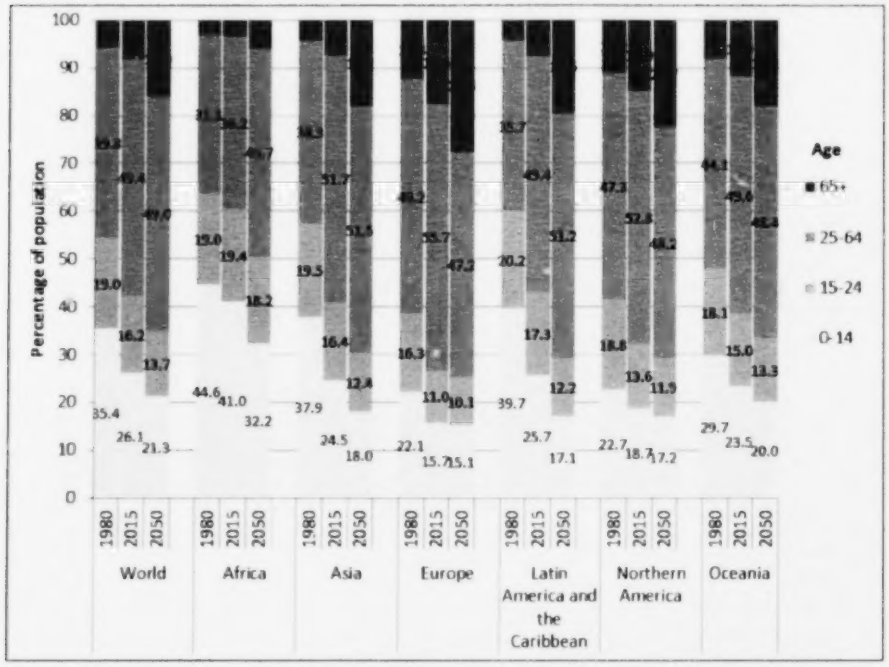
B. Regional trends in population age structures[4]

9. Although all regions are expected to experience some degree of population ageing, current levels and trends vary widely. Europe, with 18 per cent of its population aged 65 years or over in 2015, continues to have the oldest population of any major region and is projected to maintain that position for the foreseeable future (see figure II). Northern America has a slightly younger population, with older persons at 15 per cent of the total, owing to higher fertility, lower life expectancy and higher levels of immigration compared with Europe over the past several decades. Population projections for the next few decades suggest that the relative positions of the two regions will remain the same in this regard, with the share of older persons in 2050 projected to stand around 23 per cent in Northern America and 28 per cent in Europe.

[4] More details on trends by region are available in the supplementary materials to the present report, see www.un.org/en/development/desa/population/commission/sessions/2017/index.shtml.

Figure II

Percentage distribution of population by broad age group, globally and for major regions, in 1980, 2015 and 2050



Source: United Nations, *World Population Prospects: The 2015 Revision — Key Findings and Advance Tables*.

10. Asia and Latin America and the Caribbean have similar age distributions today and are expected to maintain this similarity through 2050, with the share of older persons increasing more than twofold, from around 8 per cent today in both regions to about 18 per cent in Asia and 20 per cent in Latin America and the Caribbean in 2050. Africa currently has the youngest age distribution among major regions of the world, comparable with that of Asia or Latin America and the Caribbean around 1980. By 2050, Africa is expected to attain an age distribution like that of Latin America and the Caribbean in 2000 (data not shown), with children and youth still accounting for about half of the total population.

C. Age structures in urban and rural areas

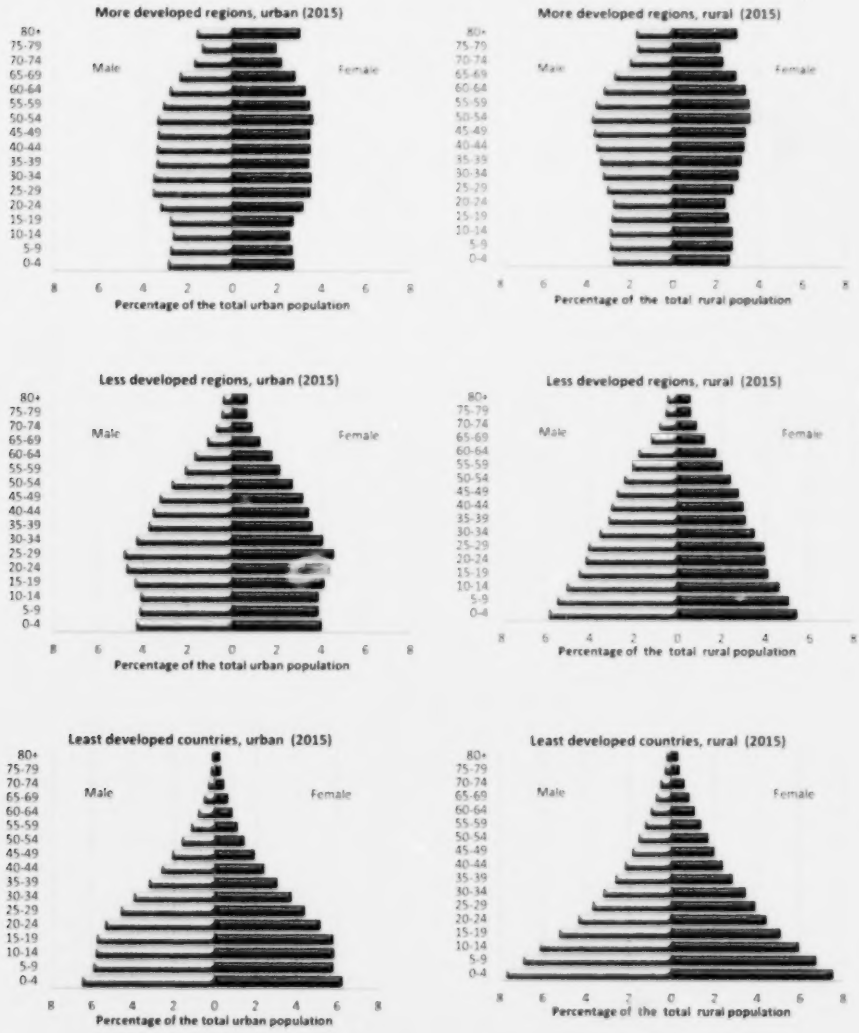
11. Urban and rural areas of countries in the developed regions,[5] and urban areas of countries in the developing regions have all experienced population ageing to a greater or lesser extent. The population age structure in rural areas of developing

[5] Following common practice, "developed" or "more developed" regions in the present report refer to Europe and Northern America plus Australia, New Zealand and Japan, while the "developing" or "less developed" regions encompass all other parts of the world.

countries remains distinct, however, as it is significantly younger than in urban areas (see figure III). By contrast, the urban and rural populations of developed countries have become more homogeneous in this regard. Women clearly outnumber men in urban and rural areas of developed countries, especially in the adult and the older age population, while there is a slight female predominance in the urban older population (but not in the rural older population) of the developing regions as a whole.

Figure III

Percentage of the population by age for urban and rural areas of countries in three development groups, 2015



Source: United Nations. *Urban and rural population by age and sex*, version 3 (2014).

12. While the urban population age structures of both the more developed and the less developed regions have a narrow base owing to relatively low levels of fertility in urban areas, a "youth bulge" is clearly visible only for the urban areas of developing countries. This results from lower fertility in urban areas, compared with rural ones, and substantial rural-to-urban migration among young people in developing countries. The urban population age structure of the least developed countries shows some evidence of a recent decline in fertility in urban areas. In the more developed regions, the shape of the population age distribution no longer resembles a pyramid, as the long-standing low levels of fertility in both urban and rural areas have resulted in more rectangular age structures.

D. Trends in the population of children and youth[6]

13. The number of children (from 0 to 14 years of age) and young people (from 15 to 24 years of age) in the world is projected to rise slightly in future decades, while declining as a share of the total population. The continued increase in the global number of children and youth is due mainly to the robust growth of these age segments in Africa, with Northern America and Oceania also contributing to the increase. These increases will be only partially compensated by declining numbers of children and youth in Asia, Europe and Latin America and the Caribbean. Population projections suggest that in 2050 there will be just under 2.1 billion children and around 1.3 billion young people in the world.

14. Because of these diverse regional trends, Africa's share of the world's children is expected to increase from 25 per cent in 2015 to 38 per cent in 2050, whereas Asia's share is projected to drop from 56 to 46 per cent. The share residing in Latin America and the Caribbean will decline from 9 per cent in 2015 to 6 per cent in 2050, while that of the other regions (Europe, Northern America and Oceania) is expected to remain in a range from 9 to 10 per cent in total.

15. The share of young persons aged 15 to 24 residing in Asia is expected to drop from 60 to 49 per cent, and in Latin America and the Caribbean from 9 to 7 per cent. By contrast, Africa, which today is home to 19 per cent of the world's youth, is expected to account for 34 per cent of all young persons in 2050. The share of youth in Europe, Northern America and Oceania is expected to remain between 10 and 11 per cent. The Arab region, which encompasses parts of Western Asia and Northern Africa, represents nearly 20 per cent of the world's young people (data not shown). Although fertility in the region is projected to decline through mid-century, some countries such as Algeria, Morocco, Tunisia and, most notably, Egypt, have reported increases in fertility in recent years, which will translate into growth of their youth populations in future years.

[6] Detailed figures of the population by broad age groups are given in the supplementary materials associated with the present report, available from www.un.org/en/development/desa/population/commission/sessions/2017/index.shtml.

E. Trends in the working-age population

16. In contrast to the expected slow growth in numbers of children and youth, the working-age population, from 25 to 64 years, is projected to increase from 3.6 billion in 2015 to 4.8 billion in 2050. Most of this increase is expected to occur in Africa (more than 653 million) and in Asia (more than 440 million). Africa's working-age population is expected to increase from 429 million in 2015 to just under 1.1 billion in 2050. Consequently, Africa's share of the global population aged 25 to 64 is expected almost to double, from 12 per cent in 2015 to 23 per cent in 2050. Asia will continue to have the largest regional share of the working-age population, but this figure will drop from 62.5 per cent in 2015 to 57 per cent in 2050. In Latin America and the Caribbean, the working-age population is projected to grow by just under 90 million between 2015 and 2050, and to retain its share of the global total at around 8.5 per cent. By 2050, Northern America and Oceania will have relatively small shares of the global working age population, 4.4 per cent and 0.6 per cent, respectively. In Europe, the population aged 25 to 64 years is projected to start declining after 2015, attaining 7 per cent of the world total by 2050.

17. Because a large proportion of international migrants is young, substantial levels of immigration tend to diminish, though not eliminate, the tendency towards population ageing. Projections for the period between 2015 and 2050 suggest that in the absence of a net inflow of international migrants to the developed regions, the ratio of older to working-age persons in the population would be 4 per cent higher than expected under the projection scenario which assumes a continuation of similar levels of the net inflow of migrants to the developed regions (*World Migration Report 2015*).[7]

18. The effect of international migration on the age composition of the population has been notable in countries of Europe that have low levels of fertility and receive substantial numbers of migrants, and in some oil-producing countries of Western Asia that host large numbers of migrant workers. In the long run, however, plausible levels of international migration are likely to be insufficient to reverse the long-term trend towards population ageing.

F. Trends in the older population

19. The world's population aged 65 years or over (referred to as "older persons" or the "older population") is expected to increase 2.6-fold from 2015 to 2050, rising from 608 million to nearly 1.6 billion. About two thirds of this increase is expected to occur in Asia, where the number of older persons is projected to increase almost threefold, from 330 million in 2015 to 956 million in 2050. Similarly, the older population of Latin America and the Caribbean is expected to more than triple, while that of Africa will increase 3.5-fold. Smaller relative increases are expected in Oceania, where the older population is projected to increase slightly more than twofold, and in Europe and Northern America, where the number of older persons is expected to increase by 44 and 50 per cent, respectively. In Europe, only the population aged 65

[7] International Organization for Migration, World Migration Report 2015: Migrants and Cities — New Partnerships to Manage Mobility (Geneva, 2015).

or older is expected to increase: all of the younger age groups considered in the present report are expected to be smaller in 2050 than they are today.

20. Other measures of ageing, such as the median age or the old-age dependency ratio,[8] yield a broadly similar outlook on trends in population ageing to that provided by the proportion of older persons in the population. However, alternative "prospective" measures of ageing[9] that emphasize the average number of remaining years of life rather than the years already lived, give a different perspective of the levels and trends of ageing. For example, when "older persons" are understood to be those whose remaining life expectancy is 15 years, and population ageing is measured as the change in the percentage of older persons so defined, the ageing appears to be much slower.[10] Indicators of prospective ageing and those based on cognitive ability by age[11] highlight to the fact that while the number and proportion of older persons is rising inexorably in all countries of the world, the overall health status, cognitive ability and potential productivity of the older population varies greatly across individuals of even the same age and has generally improved over time. A major implication is that population ageing does not need to have the dire socioeconomic consequences that are often attributed to this process. These features also imply that labour markets and health systems should adapt to accommodate and better meet the needs of the older population in all its diversity.

21. Another important characteristic of the older population is the female predominance in this age group: because women live on average longer than men, they significantly outnumber men at older ages. In 2015, women accounted for 55 per cent of the global population aged 65 years or over, and for 61 per cent of those aged 80 years or older. Europe has the highest proportion of women aged 65 or over, where they account for 59 per cent of that age group, followed by Latin America and the Caribbean (56 per cent), Northern America and Africa (55 per cent) and Asia and Oceania (53 per cent).

III. Fertility, health and education

22. A sustained fertility decline leading to smaller cohorts of children and youth is the main driver of long-term changes in population age distribution. The reduction in fertility is associated with various aspects of development. The existing research suggests that causation operates in both directions: improved health conditions and increased levels of education contribute to reductions in desired and actual family

[8] For definitions of these and other demographic measures see https://esa.un.org/unpd/wpp/General/GlossaryDemographicTerms.aspx.

[9] Warren C. Sanderson and Sergei Scherbov, "The characteristics approach to the measurement of population aging", *Population and Development Review*, vol. 39, No. 4 (December 2013), and "Are we overly dependent on conventional dependency ratios?", *Population and Development Review*, vol. 41, No. 4 (December 2015).

[10] Warren C. Sanderson and Sergei Scherbov, "Age structure, mortality and prospective ageing", presentation at the United Nations expert group meeting on changing population age structures and sustainable development, New York, 13 and 14 October 2016.

[11] Vegard Skirbekk, "Ageing, health and work potential", presentation at the United Nations expert group meeting on changing population age structures and sustainable development, New York, 13 and 14 October 2016.

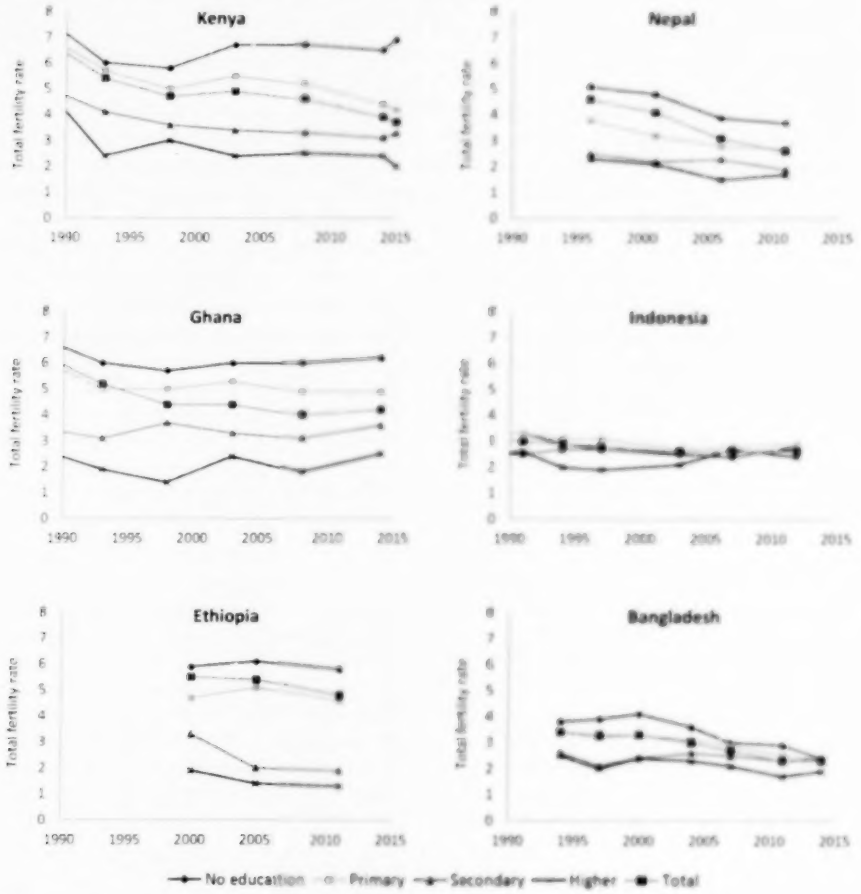
sizes, while reduced fertility often leads to higher per capita levels of spending on health and education.

23. A recent analysis of data for 80 countries in the period from 1970 to 2010 concluded that, controlling for time and per capita income, female educational attainment has a substantial downward effect on fertility.[12] On average, one additional year of female education was associated with a 2.4 per cent reduction in the total fertility rate. Male education was also found to have a negative effect, but much smaller in magnitude. Figure IV provides an illustration of observed fertility differentials by level of educational attainment in six developing countries. In all cases, the fertility of women in the highest educational category (more than secondary) was lower than for those in the lowest category (no education). However, the differences between those two groups, and compared with women with intermediate levels of education (primary and secondary), varied considerably across countries. Whereas levels of fertility maintained a stark inverse relationship to levels of education throughout the study interval in Ethiopia, Ghana, Kenya and Nepal, differences between educational groups in Bangladesh, and even more so in Indonesia, were smaller at the start and have narrowed in recent years.

[12] This result is broadly supported by research, for example, that cited in David E. Bloom and Dara Lee Luca, "The global demography of ageing: facts, explanations, future", PGDA Working Paper, No. 130 (Cambridge Massachusetts, Harvard University, 2016).

Figure IV

Lifetime total fertility (number of children per women) by level of female schooling, six developing countries, 1990 to 2015



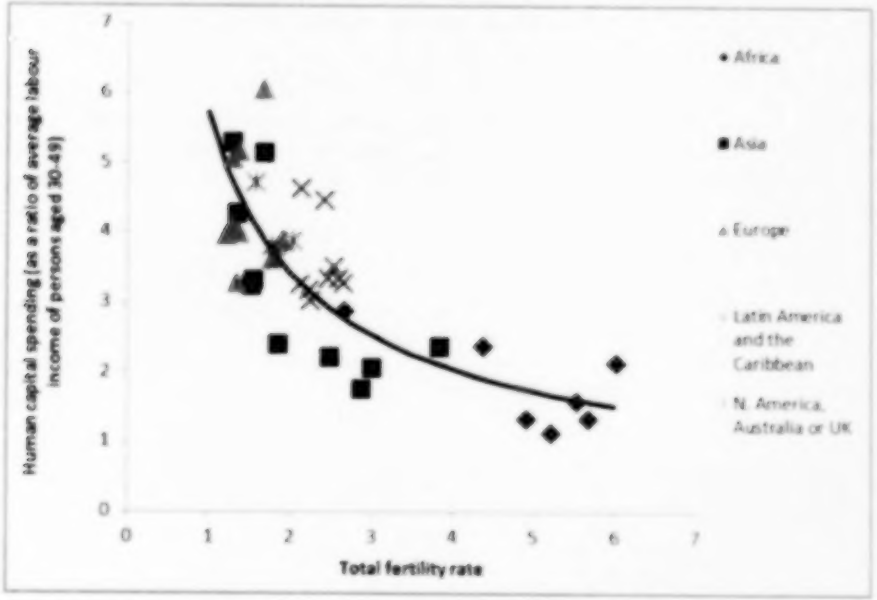
Source: Elina Pradhan, "Link between education and fertility in low and middle-income countries", presentation at the United Nations expert group meeting on changing population age structures and sustainable development, New York, 13 and 14 October 2016.

24. Although educational attainment has a substantial impact on fertility levels and changes over time, other social, economic and cultural factors, as well as access to family planning, matter as well.

25. Data from the National Transfer Accounts[13] provide evidence of the association between reduced fertility and increased spending on human capital, the latter measured by the combined spending on health and education on children and youth. The association is illustrated in figure V, which shows large differences in human capital spending between countries with low and high levels of fertility.

[13] See http://ntaccounts.org/web/nta/show/.

Figure V
Total human capital spending versus total fertility in 39 countries



Source: Andrew Mason, Ronald Lee and Jennifer Xue Jiang, "Demographic dividends, human capital and saving", *The Journal of the Economics of Ageing*, vol. 7 (April 2016), fig. 3.

26. While reductions in fertility tend to be associated with increased spending on health, the association with spending in education is particularly strong. Numerous other studies[14] have also found a significant negative relationship between educational attainment and fertility.

IV. Individual and household-level intergenerational support

A. Changes in intergenerational co-residence

27. The declining fertility and mortality that are an integral part of the demographic transition also affect patterns of co-residence across generations. In addition to the purely demographic changes, patterns of intergenerational co-residence are affected also by factors such as economic growth, industrialization and cultural norms.[15] For example, while mortality decline has increased the probability that a child will have two surviving parents, increasing rates of divorce or separation have diminished the likelihood that a child with two surviving parents

[14] Shareen Joshi and T. Paul Schultz, "Family planning and women's and children's health: long-term consequences of an outreach programme in Matlab, Bangladesh", *Demography*, vol. 50, No. 1 (February 2013), in addition to those cited above.

[15] Steven Ruggles and Misty Heggeness, "Intergenerational coresidence in developing countries", *Population and Development Review*, vol. 34, No. 2 (February 2008).

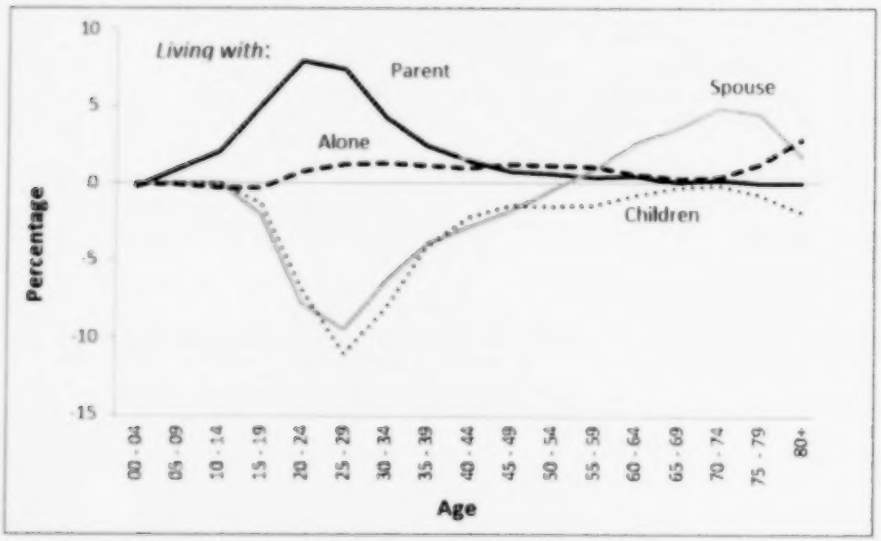
will co-reside with both of them. For adults in the working age range, the mortality and fertility decline has led to a larger number of surviving parents and a smaller number of surviving siblings, resulting in an increased likelihood that a young adult may co-reside with a parent. From the perspective of the older generations, reductions in fertility have decreased the number of adult children, which has been offset only partially by their increased probability of survival to adulthood.

28. Net out-migration generally reduces the co-residence of youth and working-age adults with their parents, and sometimes also the co-residence of parents with their own children, when migrants leave their children in the care of grandparents or other relatives.

29. Illustrative evidence from 32 countries in different regions of the world is provided in figure VI, which shows increased co-residence between young adults and their parents combined with falling numbers of young and middle-aged adults co-residing with spouses and their own children between the 1980s and the 2000s. There has been a registered increase in the number of persons over age 50 living with their spouses in this group of countries.

Figure VI

Changes from the 1980s to 2000s in the percentage of the population living with immediate relatives or alone, by age: aggregate of 32 countries



Source: Estimates based on microdata from 32 countries in all regions of the world, available from the International Public Use of Microdata Series database and the Eurostat Labour Force Surveys. The 32 countries are: Argentina, Austria, Brazil, Cameroon, Chile, Costa Rica, Ecuador, France, Greece, Haiti, Hungary, India, Indonesia, Ireland, Jamaica, Kenya, Malawi, Malaysia, Mongolia, Morocco, Panama, Portugal, Puerto Rico, Senegal, Switzerland, Thailand, Turkey, United Republic of Tanzania, United States of America, Uruguay, Venezuela (Bolivarian Republic of) and Viet Nam.

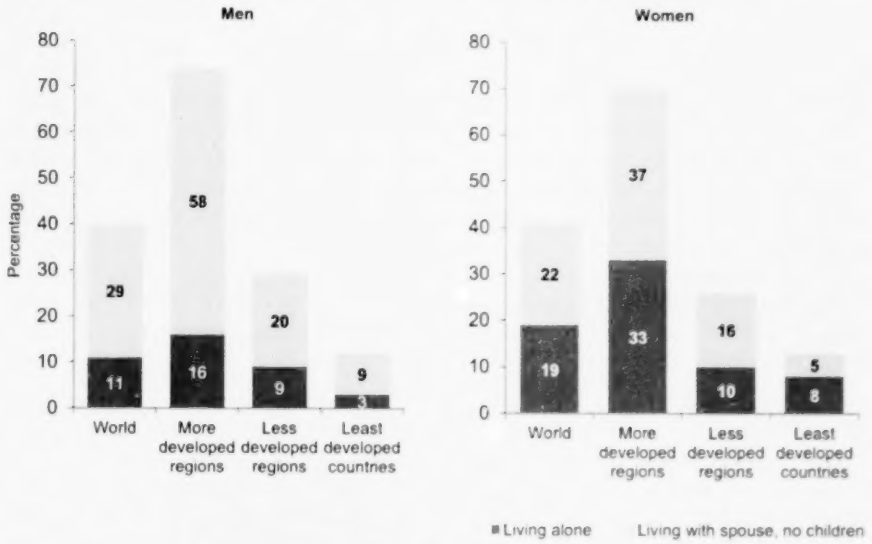
30. These trends are related to the delay in leaving the parental home and the increase in the average age at which unions are formed and childbearing begins. As

the duration of education increases across successive cohorts, young adults delay their entry into the labour market and tend to remain longer in the parental home, depending at least partially on their parents. The extent and duration of their economic dependency has profound implications for intergenerational support and, potentially, for economic growth as well (see section V).

31. One of the features associated with population ageing and changes in residential arrangements is that independent living (namely, living alone or with a spouse only) among older people is becoming more common. Globally, about 40 per cent of the world's population aged 60 or over lived independently between 2000 and 2010 (figure VII).

Figure VII

Percentage of population aged 60 years or over living independently (alone or with spouse only), by sex: world and development region, circa 2005



Note: Estimates are for 101 countries, from 2000 to 2010 (modal year is 2005), based on microdata from censuses and surveys. Details are given on pp. 38 and 39 of *World Population Ageing 2015*.

32. The difference in the proportion of the population living independently in the more and less developed regions of the world is substantial. Between 2000 and 2010, almost three quarters of all older persons lived independently in the more developed regions, compared with roughly one quarter in the less developed regions and one eighth in the least developed countries.

33. Despite significant international variability, there is in general a positive association across countries between the proportion of older persons who live independently and the degree of population ageing. In countries where the number of persons aged 60 years or over accounted for less than 10 per cent of the population between 2000 and 2010, the number living independently seldom surpassed 40 per cent. By contrast, in all countries where older persons accounted

for more than 20 per cent, older persons who lived independently constituted a majority. If this association between the degree of population ageing and the extent of independent living continues to hold in the future, it can be expected that a greater number of older persons will live independently in future decades in both the more and the less developed regions.

B. Gender and balancing of work-family obligations

34. In the ageing populations of the more developed countries (and of some developing countries), women have increased their participation in the labour force while, on average, they are having children later in life.[16] These changes, together with the extended lifespans of parents and grandparents, have produced what is referred to as the "sandwich generation". The situation particularly affects women who take care of dependent children and elderly parents, while also playing a more active role in the workforce.

35. While women's work in the household is generally not accounted for in standard economic statistics, there is increasing evidence of the sizeable contribution of women to both market and non-market production which, when properly valued, can amount to a large fraction of total work effort. In Senegal, for example, women contribute as much as 34 per cent of the total economy's market work, 87 per cent of all household production and 58 per cent of total aggregate work.[17] In the case of Mexico, household production, most of which is contributed by women, represents an estimated 22 per cent of gross domestic product (GDP). In some countries, such as Brazil, there is evidence that women's household work on average increases when they marry as well as when they have children, whereas men's household work declines somewhat when they marry, and does not seem to change with the birth of children.[18]

36. In this context, policies that support the participation of women in the labour force, of parental leave for both father and mother, and as affordable child care and long-term care for the elderly could contribute to lessening gender inequalities in the distribution of household and market work. These policies could also augment the demographic dividend (see chapter V) by increasing total labour force participation even after the size of the working-age population has ceased to grow, and thereby help economies to deal with the fiscal challenges associated with population ageing.

[16] The mean age at which childbearing begins in developed countries increased from 26.5 years in the period 1980-1985 to 29.2 years in the period 2010-2015, and it is expected to rise to 31 years in the period 2045-2050.

[17] Gretchen Donchower, "Gender, age and economic activity", presentation at the United Nations expert group meeting on changing population age structures and sustainable development, New York, 13 and 14 October 2016.

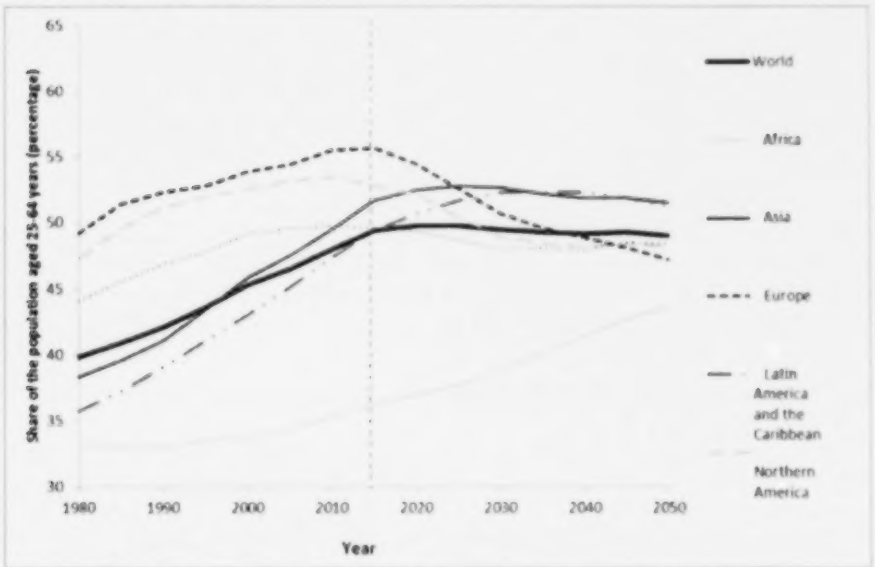
[18] Simone Wanjman, "Demographic dynamics of family and work in Brazil" presentation at the United Nations expert group meeting on changing population age structures and sustainable development, New York, 13 and 14 October 2016.

V. Consequences for the population and the macroeconomy

37. One of the features of the changing population age structures, addressed in section II above, is the end of the global rise in the proportion of the population in the working ages (25 to 64 years). This is happening at a time in which total labour force participation rates have been falling at the world scale and in some of the major economies of the world, including China, India, Japan and the United States.[19]

38. While the absolute numbers of people in the working ages will continue to rise over the coming decades, the share of the working-age population in the world is expected to remain relatively constant through 2050, staying stable or declining in the majority of regions, the main exception being Africa (see figure VIII), which will experience a substantial increase.

Figure VIII
Working-age population as a share of total population (percentage), by region



Source: United Nations, *World Population Prospects: The 2015 Revision — Key Findings and Advance Tables*.

39. Countries in Africa and from other regions with vigorous growth in working-age population and relatively young age structures[20] have the potential to realize a sizeable "demographic dividend", namely, a boost to economic growth resulting from population changes associated with the demographic transition. In these

[19] World Bank, World Development Indicators 2017 database, available from http://data.worldbank.org/data-catalog/world-development-indicators.

[20] Including some in Asia, Latin America and the Caribbean, and the Arab region (see E/ESCWA/SDD/2016/Technical Paper.3).

countries, policies to ensure universal access to reproductive health services, including family planning, as well as others to expand education and employment opportunities, should receive priority consideration. These policies would enable or accelerate, as the case may be, the first demographic dividend, namely, the increase in the ratio of producers to consumers generated by the shift of the population age structure at the intermediate stages of the demographic transition. Even when an independent effect of age structure on economic growth is not verified, improvements in educational attainment contribute to productivity and income growth, implying that a substantial portion of the demographic dividend may be in fact an "education dividend".[21]

40. Latin America and the Caribbean and Asia have experienced large increases in the share of their working-age population in recent decades, but are expected to see modest relative increases through the 2020s and to experience declines thereafter. Countries in these regions should prioritize policies to facilitate the second demographic dividend, which results from increased investments in the education and health (human capital) of children and youth, as well as from the increased accumulation of assets generated by population ageing and prolonged retirement associated with extended lifespans. Policies on removing barriers to female labour force participation, in addition to their inherent value and contribution to reducing gender inequalities, could yield additional macroeconomic benefits.

41. Europe and Northern America are expected to see a sharp fall in the share of the working-age population between 2015 and 2050, while Oceania is expected to experience a more modest decline. Countries in these regions will face the challenge of relative scarcity of labour supply while their populations continue to age. Policies to facilitate safe, regular and orderly migration, to support the life-long learning and employment of older persons, together with family-friendly policies, would complement fiscal policies for the long-term sustainability of social security systems such as those addressed below.

A. Work and old-age income security in ageing populations

42. The working-age population is ageing, with an increasing number of workers past the age of 50 or 60, raising questions about the future of labour productivity. Economic activity at older ages varies greatly across countries. For the world as a whole, the labour force participation rate[22] of persons aged 65 years or over was 30.3 per cent for men and 14.5 per cent for women in 2015.[23] In the more developed regions, the participation rates were 16.8 per cent for older men and 9.4 per cent for older women, compared with 37.5 per cent for older men and 17.7 per cent for older women in the less developed regions. In the least developed countries, 59.8 per cent of older men and 35.8 per cent of older women participated in the labour force in 2015.

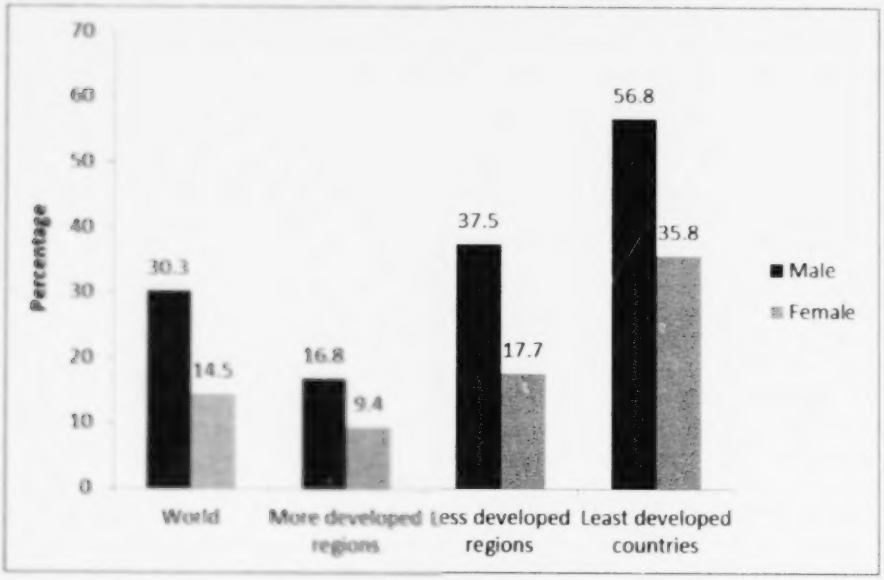
[21] Jesus Crespo Cuaresma, Wolfgang Lutz and Warren Sanderson, "Is the demographic dividend an education dividend?", *Demography*, vol. 51 (February 2014).

[22] Defined as the share of the working-age population that is either employed or seeking employment.

[23] Profiles of Ageing 2015 database, available from https://esa.un.org/unpd/popdev/Profilesofageing2015/index.html.

43. Labour force participation among older men was highest in Africa (see figure IX), followed by Latin America and the Caribbean, Asia, and Northern America, and was lowest in Oceania and Europe. Labour force participation was lower for older women than for older men in all regions but followed a similar pattern across regions.

Figure IX
Labour force participation of persons aged 65 years or older, by sex, 2015



Source: United Nations, *World Population Ageing 2015*.

44. Labour force participation of men aged 65 years or over has increased gradually from 1990 to 2015 in Europe, Oceania and Northern America, while it declined steadily in Asia, Africa and Latin America and the Caribbean. Older women's labour force participation increased in all regions between 1990 and 2015, reflecting the gradual trend towards higher levels of labour market activity among women of all ages.

B. Pensions in ageing societies

45. Social protection for all, including the need to ensure social protection floors to maintain a minimum standard of living, is a key goal of the 2030 Agenda for Sustainable Development. In recent decades, many developing countries with relatively young populations have expanded the coverage of contributory pension schemes or have established non-contributory "social" pensions. Meanwhile, many developed countries with a greater proportion of older populations have reformed their pension systems by raising statutory retirement ages in response to increases in life expectancy, increasing required contributions and the length of the minimum

contributory period, and reducing other incentives for early retirement. Some Governments have also introduced reforms to augment the role of private pensions.

46. The availability (or population coverage) and adequacy (or generosity) of pensions influence labour force participation at older ages. When pensions are not available or provide a low benefit, as in many developing countries, retirement is not a viable option for a majority of the population. In developed countries, which have high levels of coverage and generous benefits, continuing to work at older ages is less necessary, and labour force participation is therefore lower. This inverse relationship can also be observed in the changes over time within countries or regions. For example, in most countries of the Organization for Economic Cooperation and Development (OECD), after a long period of steady decline in response to the increased availability and generosity of pension benefits, the participation of older men in the labour force has increased recently in response to a rise in the statutory retirement age and other restrictions in benefits. Meanwhile, the participation of older women in the labour force in OECD countries has increased steadily over the past 25 years, reflecting pension system reforms that encourage women to continue to work at older ages.

47. Government spending on public pensions also varies widely across countries, reflecting differences in population ageing, the extent of population coverage and the generosity of benefits. Public spending on pensions in most European countries ranged from 5 per cent to 12 per cent of GDP. While Japan had the oldest population age distribution in the world in 2015, its level of public pension expenditure (10.2 per cent of GDP) was lower than in Italy (15.8 per cent of GDP), owing to Japan's less generous pension benefits relative to pre-retirement earnings. In most countries of Latin America and the Caribbean, public spending on pensions varied from 1 per cent to 8 per cent of GDP. The relatively low level of spending on pensions in this region reflected a combination of incomplete pension coverage (generally limited to those in the formal sector) and somewhat younger populations than in Europe.

48. An area of increasing policy concern related to ageing is long-term care. Despite the overall improvements in health noted previously, a significant proportion of older people will experience declines in capacity to the point where they require long-term care and support. This care can often be delivered within their homes or communities and should be provided in a manner that respects the basic rights and human dignity of older persons and that does not unduly burden women as caregivers. Governments and other stakeholders should support family caregivers so that such caregivers can provide better care and experience less stress. They should also provide community-based and respite care, institutional care for the severely disabled and support for community self-help groups and promote accreditation and standards for private care providers.[24]

[24] World Health Organization (WHO) *World Report on Ageing and Health* (Geneva, 2015); see also Global strategy and action plan on ageing and health (2016-2020), summary available from http://who.int/ageing/global-strategy/en/.

C. Macroeconomic implications of changing population age structures

49. Internationally comparable evidence on the size of the first demographic dividend can be obtained by standardized measures of the "support ratio"[25] based on age profiles of consumption and production combined with estimates and projections of population size disaggregated by age. Following this approach, the United Nations report entitled *World Population Ageing 2015* (ST/ESA/SER.A/390), shows that many countries in Africa and some in Asia and in Latin American and the Caribbean are expected, on the one hand, to benefit from increasing support ratios through 2050. On the other hand, countries projected to experience population ageing and declining economic support ratios are expected to see negative macroeconomic impacts from changes in the population age distribution. The decline in the support ratio is expected to be especially pronounced in China, Germany, Italy, the Republic of Korea, Slovenia, Spain and Thailand, where it could slow economic growth by 0.5 percentage points or more per year between 2015 and 2050.

50. The second demographic dividend can remain positive long after the phase of the first dividend has elapsed. Recent evidence on the size and duration of both the first and the second dividends[26] suggests that:

(a) The "window of opportunity" for the demographic dividends opened in Europe in the early 1960s, then in Asia, Oceania and the Americas in the mid-1970s, and in Africa in the early to mid-1990s;

(b) The largest (peak) annual increases in economic growth associated with the demographic dividends are estimated to have occurred in Asia (as high as 2.3 per cent per year), owing to the region's exceptionally rapid demographic transition and expansion of education. For the other regions, the peak dividends are estimated to range from 1.5 per cent to 1.8 per cent per year;

(c) Even though Africa's demographic transition has been delayed and is projected to proceed at a slower pace than in other developing regions, it could yield the largest total demographic dividend over the long run. This is partly a reflection of the lower starting value of the support ratio in Africa compared with other regions. To realize this potential, expanded family planning programmes, sufficient opportunities for productive employment and effective means for the accumulation of human and physical capital during the dividend period will be required;

(d) The second demographic dividend is potentially much larger and longer-lasting than the first. However, its realization is less certain, as it presumes that favourable policies, such as those mentioned above, and an overall economic environment conducive to sustained growth will be in place over the course of the demographic transition. Although this would be consistent with the successful implementation of the 2030 Agenda for Sustainable Development in countries

[25] Ratio of equivalent producers to equivalent consumers in the population (see details in *National Transfer Accounts Manual: Measuring and Analysing the Generational Economy* (United Nations publications, Sales number E.13.XIII.6).

[26] Andrew Mason and others "Support ratios and demographic dividends: Estimates for the World". Manuscript, 14 November 2016.

currently at the early stages of the demographic transition, it cannot be considered a foregone result.[27]

VI. Need for data disaggregated by age and sex

51. To fulfil the pledge of leaving no one behind, it is important to formulate policies and assess progress made towards the achievement of the Sustainable Development Goals distinguishing the population in different age groups, in particular children, youth and older persons. To document changes in population age structures and to evaluate the impacts of those changes, as described in the present report, age-disaggregated data are essential (see E/CN.9/2016/3).

VII. Conclusions and recommendations

52. Persistent changes in the population age distribution are a key feature of the demographic transition from relatively high to relatively low levels of fertility and mortality. These changes are attributable to the historic reduction in death rates and, most critically, to reduced levels of fertility. In countries that are net receivers of significant numbers of international migrants, migration may also have an impact on the population age distribution.

53. Although the demographic transition is a universal phenomenon, its timing and speed — and its implications for sustainable development — vary greatly across countries and regions. The world is now seeing a relatively slow pace of growth in the population of children and youth, while the population aged 65 years or over is growing more rapidly. The rate of growth in this age segment is especially high in Africa and in parts of Asia and Latin America. The share of older persons in the population is highest in Europe and other developed countries, reflecting the earlier start of the demographic transition in those populations.

54. Globally, the growth in the number of children and youth has decelerated and even turned negative in some countries and regions. This deceleration presents an historic opportunity to invest in human capital by improving access to health and education and enhancing the prospects for productive employment available to younger cohorts. **Governments should actively pursue these opportunities both for their intrinsic value in fulfilling basic rights and as an investment in future economic growth and in the well-being of present and future generations.**

55. Absolute numbers of children and youth are still growing rapidly in many African countries and in parts of Asia. Countries where fertility remains high are in the early stages of the demographic transition. **The Governments of these countries should consider adopting policies to support universal access to sexual and reproductive health-care services, including family planning, in accordance with the objectives of the Programme of Action of the International**

[27] See Garenne (2016) "Demographic dividend in Africa: macro and microeconomic effects", *n-IUSSP*, December 2016, UNFPA (2014) *State of the World Population Report 2014, The Power of 1.8 Billion* and Zulu (2016) "Africa's demographic transition and demographic dividend". Presentation at the United Nations expert group meeting on changing population age structures and sustainable development, New York, 13 and 14 October 2016, among others.

Conference on Population and Development and the Goals and targets of the 2030 Agenda for Sustainable Development.

56. Population ageing is a major global demographic trend that brings both opportunities and challenges. One challenge faced by countries where population ageing is proceeding rapidly is the increased fiscal pressure on public support systems for older persons, including pensions and health-care programmes, raising questions about their financial sustainability. **Governments should anticipate demographic trends and their likely impacts on social security systems and consider possible increases in the statutory age of retirement in response to increasing longevity and other reforms to ensure the economic security of future generations of older persons.** Mindful that women constitute a majority of the older population, and mindful of the persistent gender gap in labour force participation, system coverage and benefits, **Governments should consider policies to promote gender equality in pension systems.**

57. Where contributory pensions exclude important segments of the workforce owing to socioeconomic constraints to stable labour force participation, informality or other factors, **Governments should consider social pensions to sustain a minimum level of well-being for all older persons, in accordance with the Madrid International Plan of Action on Ageing and with Sustainable Development Goal 1 on ending poverty, including through social protection systems and floors.**

58. **All countries, but especially those in advanced stages of population ageing and facing a relative scarcity of labour should consider policies to facilitate safe, orderly and regular migration, and to support life-long learning and employment of older persons, as well as family-friendly policies that can complement fiscal policies for the long-term sustainability of social security systems.**

59. Government policies need to address the difficulties faced by young and middle-aged adults, particularly women, in balancing the demands of work with family obligations, including the support and care provided for children, older parents and grandparents. **Governments should consider policies in support of affordable child-care programmes, paternal and maternal leave programmes, part-time and flexible employment opportunities for both men and women, and long-term care programmes.** These and other policies mentioned above, would also contribute to the empowerment of women, to the recognition of women's overall economic contributions and to a reduction of gender inequalities in the household, the labour market and society as a whole.

60. Changes over time in the population age distribution can produce two broad macroeconomic benefits. A first demographic dividend can provide a boost to economic growth during a period when the share of children and youth has fallen as a result of a recent drop in fertility, while the share of older persons in the population is still not very high, yielding relatively high and increasing economic support ratios. **Governments should take full advantage of this time-bound window of opportunity by expanding investments in health and education for children and youth, and over the life course, as such investments may improve both personal well-being and labour force productivity.**

61. Countries may also benefit from a second demographic dividend. Those that have invested in the human capital of their population, and where older persons have accumulated significant assets, population ageing can help to intensify capital accumulation in the macroeconomy, driving or accelerating present and future economic growth. **To reap the benefits of both dividends, Governments should implement policies to ensure the productive employment of youth and adults and to encourage personal saving.**

62. Population ageing also has implications for the health of the population. The number of people requiring extended care due to disability or functional limitation is likely to increase in all countries. **National health systems should implement programmes to encourage healthy lifestyles that start in childhood and continue into adulthood, empowering individuals to cope better with the decline of intrinsic capacity in old age. Health-care systems should emphasize the maintenance of maximum attainable levels of functional capacity throughout the life course, especially at older ages.**

63. **Governments, supported by the United Nations and other international organizations as appropriate, should promote the collection, dissemination and analysis of demographic data disaggregated by age, sex, and other relevant characteristics, as an aid to designing policies and assessing progress towards the achievement of the Sustainable Development Goals, especially those pertaining to particular age groups, such as children, youth and older persons.**

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General debate

Monitoring of population programmes, focusing on changing population age structures and sustainable development, in the context of the full implementation of the Programme of Action of the International Conference on Population and Development

Report of the Secretary-General

Summary

The period from 2016 to 2030 will be marked by major changes in age structure in countries around the world, including a steady increase in the median age. The differences in age structures among countries will rise to historically high levels during this period, underscoring the importance of countries understanding and responding to their national age structure and trends to ensure optimal policies and programmes for national development. Changing age structure is a central aspect of the implementation of the Programme of Action of the International Conference on Population and Development, which emphasizes individual life transitions and trajectories over the course of demographic transitions. Governments have prioritized efforts to advance progress in sustainable development through demographic dividends, which offer a strategic basis for focusing on and prioritizing investments in empowerment, including through sexual and reproductive health and reproductive rights, education and employment, linked to age structure.

* E/CN.9/2017/1.

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The present report, prepared by the United Nations Population Fund, provides numerous examples of policies and programmes reflecting the thematic pillars of the International Conference on Population and Development beyond 2014 — dignity and human rights; health, place and mobility; governance and accountability; and sustainability — into which Governments are integrating changes in age structure to achieve the aims of the Programme of Action and the 2030 Agenda for Sustainable Development.

I. Introduction

1. The period from 2016 to 2030 will be marked by major changes in age structure in countries around the world, shaping the demands and policies of national development. As public health gains advance in most countries, global life expectancy will continue to increase, contributing to a rise in the number and proportion of older persons. In many of the countries with the youngest populations, both mortality and fertility are declining, and large cohorts are entering the adolescent and young adult years, offering timely opportunities for a demographic dividend. In countries with sizeable older populations, where low levels of fertility have persisted for several decades, the pace of ageing requires policy changes in working life, pensions and health care to provide for the wealth and well-being of an older society.

2. These changes in age structure are co-occurring with other significant population changes, in particular urbanization and substantial increases in population mobility, both of which were the subject of major global attention in 2016, at the United Nations Conference on Housing and Sustainable Urban Development (Habitat III) and the high-level plenary meeting on addressing large movements of refugees and migrants. In these contexts, population dynamics have consistently been identified as central to the national pursuit of sustainable development.

3. Over the past 50 years, countries have diverged greatly in age structure and now stand far apart. This disparity underscores the absolute importance of now creating policies and programmes for national development that clearly account for the current status of and trends in age structure. The present report reviews policies and programmes reflecting the thematic pillars of the 20-year review of the International Conference on Population and Development beyond 2014 (see A/69/62) — dignity and human rights; health, place and mobility; governance and accountability; and sustainability — in which Governments and other stakeholders are responding to changes in age structure to achieve the aims of the Programme of Action of the Conference and the 2030 Agenda for Sustainable Development.

II. Age structure lens for sustainable development

4. In the 2030 Agenda, Member States recognized the importance of age structure for sustainable development. In paragraph 25 of the 2030 Agenda, they committed to helping their countries to achieve a demographic dividend, with special emphasis on providing children and youth with a nurturing environment for the full realization of their rights and capabilities. Target 17.18 of the Sustainable Development Goals calls for all relevant population-based indicators to be disaggregated by age as a means of ensuring that the impact of development policies on persons of all ages will be monitored and that persons of all ages will have a better chance to participate in, and benefit from, development. In paragraph 34 of the 2030 Agenda, Member States further committed to taking account of population trends and projections in national, rural and urban development strategies and policies.

5. Changing age structure and sustainable development have been a central aspect of the implementation of the Programme of Action by focusing on individual life transitions over the course of demographic transitions. It was recognized in 1994, in the Programme of Action, paragraph 6.16, that dramatic changes in age structure were occurring, driven by declining fertility and reinforced by continued declines in mortality. In its resolution 2012/1 (see E/2012/25), the Commission on Population and Development called upon Governments to promote both intergenerational equity and solidarity by taking into account the implications of the changing age structures of the population in medium- and long-term development planning and by considering the age-related consequences of social and economic policies.

6. Developing countries made great progress in the reduction of child mortality and the achievement of universal primary education during the period of implementation of the Millennium Development Goals, generating significant improvements in child health and well-being. Yet the entry into adolescence marks a critical time, especially for girls, which has too often been neglected.[1] Expanded investment in empowerment, including sexual and reproductive health and reproductive rights, and quality education at this critical juncture has a lifelong effect, and when such investment extends broadly across the population, it results in a surge of human capital into society. When this surge coincides with a demographic bulge of young people owing to declining fertility, the result is an especially high proportion of the population with better health and more education moving into its most productive years. If these young people are met with a society and an economy that offer real opportunities for decent work, the demographic dividend of accelerated development can be reaped in the course of a generation.[2]

7. As people of this generation move through their working ages, they carry with them greater health and well-being. The situation of middle-aged and older persons, their health in later years, their ability to continue to work and their life expectancy are all strongly dependent on the investments that they received earlier in their life course. Having greater incentive to accumulate assets to pay for consumption later in life, a wealthier older population is well positioned to invest in the younger generation, continuing the positive cycle of advancing health, nutrition, education and opportunity. Again, with the right investment, the result can be a sustained development boon known as the second demographic dividend.[3]

8. Figure I indicates how supporting people in their navigation of critical transitions throughout their lives can result in the realization of major returns in the form of improved individual health and well-being and cumulative progress towards

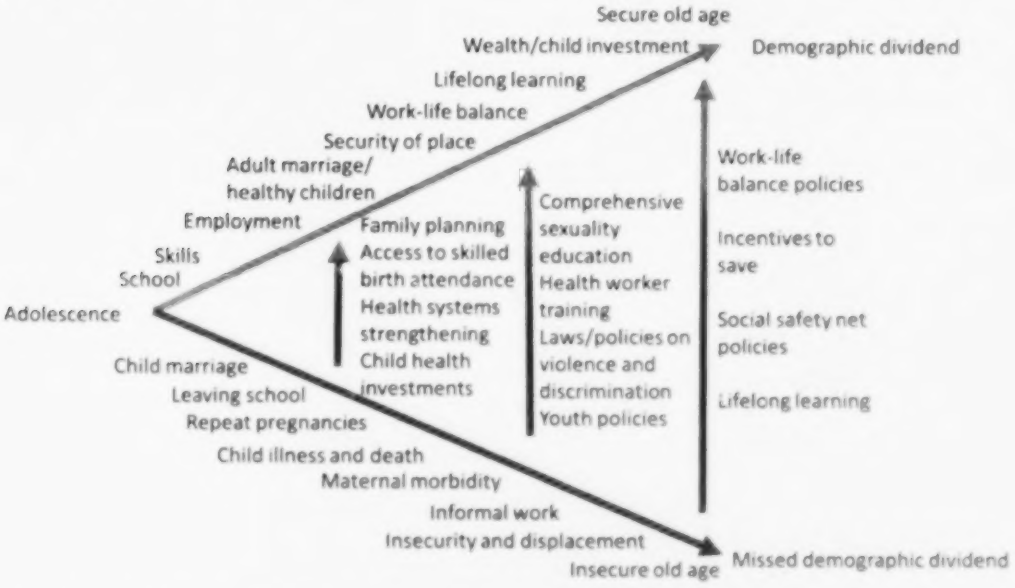
[1] *State of World Population 2016* (United Nations publication, Sales No. E.16.III.H.1).

[2] United Nations Population Fund (UNFPA), "UNFPA: a value proposition for the demographic dividend" (December 2015); ibid., "Sahel women's empowerment and demographic dividend" (June 2016); Kenya National Council for Population and Development, UNFPA and African Institute for Development Policy, "The demographic dividend knowledge-sharing symposium for the East and Southern Africa region", report summary for the symposium held in Nairobi in August 2015; UNFPA and African Institute for Development Policy, "Accelerating human capital development to optimize Zambia's chances of harnessing the demographic dividend", Policy Brief (May 2015).

[3] Ronald Lee Andrew Mason, "What is the demographic dividend?", *Finance and Development*, vol. 43, No. 3 (September 2006).

sustainable development through these demographic dividends. Thanks to major improvements made in child protection, health and education around the world, an emphasis has been placed on transitions beginning at adolescence.

Figure I
Demographic dividends through lifelong investments



Source: United Nations Population Fund, "UNFPA: a value proposition for the demographic dividend" (December 2015).

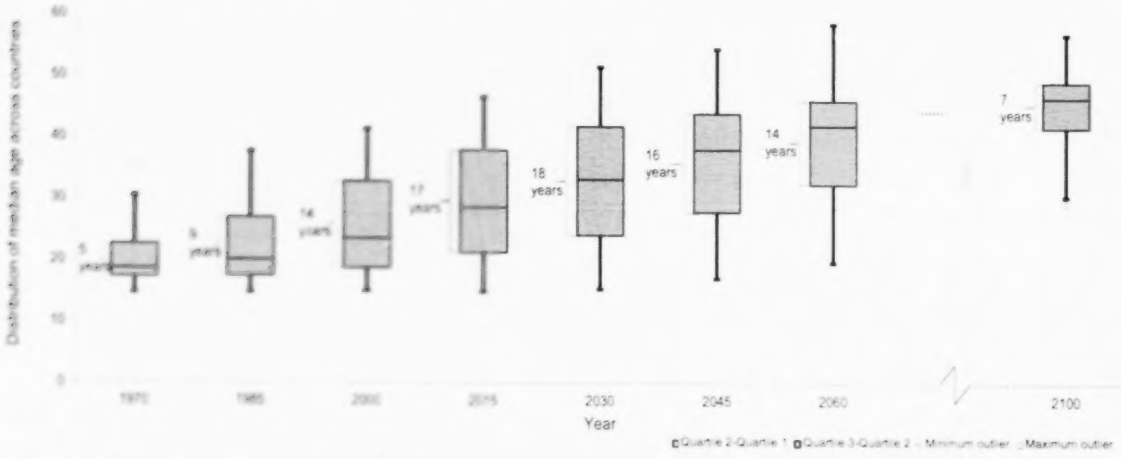
9. A key implication of the demographic dividends and of the array of investments across the life course, as identified in figure I, is that there is no ideal age structure for development. Gains can be realized from diverse age structures, yet when countries do not invest effectively, any age structure can present major challenges, from lack of education for the young to limited work for persons of all ages to insufficient care and social protection for older persons. Furthermore, age structures are dynamic, changing continually and sometimes rapidly. The world is in the process of ageing, with the median age increasing from less than 20 years in 1970 to nearly 30 years today to the expected more than 40 years by 2060. This ageing is occurring at widely differen. rates, with countries found across an extremely wide range. Figure II displays the significant variation in median age in 2015 throughout the world, with country populations ranging from the median age of approximately 15 years to approximately 47 years.

Figure II
Median age by country in 2015

Source: Data extracted from *World Population Prospects*, 2015 revision.

10. Figure III indicates the magnitude of the past, current and future diversity in median age across countries. The current number of years between the 75th and the 25th percentiles of the countries' median age is 17; this number will increase to 18 by 2030 — the high mark, past and future, according to United Nations data and projections. There will be a gradual decrease in this diversity in median age after 2030, declining to just 7 years in 2100. Therefore, it is likely that countries will never again be more diverse in their age structure than during the course of the implementation of the 2030 Agenda. Hence, each country needs good census data, sound demographic projections and analysis, and population-specific solutions. Countries must have the capacity to understand their age structure and to tailor their specific policies and programmes contextually, in order to leave no one behind now or in the future.

Figure III
Diversity in median age across countries, 1970 to 2060 and 2100



Source: World Population Prospects: The 2015 Revision.

Age structure and the 2030 Agenda: reducing poverty and promoting prosperity

11. Incorporating changing age structure into sustainable development is critical for achieving the 2030 Agenda. The theme of the high-level political forum on sustainable development in 2017 is "Eradicating poverty and promoting prosperity in a changing world", and the forum will feature national reviews of progress made on meeting the Sustainable Development Goals related to poverty, nutrition, health, gender equality, infrastructure and oceans. Changing age structure will have an impact on efforts in most of these areas.

12. A wide range of research shows the importance of health (Goal 3) and gender equality (Goal 5) in poverty reduction and prosperity. Improvements in health, a major driver of the ageing of the population, have major effects on economic growth and poverty reduction across the lifespan.[4] Poor health undermines children's ability to attend school and their performance.[5] Within the arena of sexual and reproductive health, the AIDS epidemic has resulted in a decline in the agricultural workforce by 3 to 10 per cent in high-prevalence countries, contributing to food shortages and poverty and affecting the age structure and productivity of the surviving population

[4] Dean T. Jamison and others, "Global health 2035: a world converging within a generation", *The Lancet*, vol. 382, No. 9908 (December 2013).

[5] Karin Stenberg and others, "Advancing social and economic development by investing in women's and children's health: a new global investment framework", *The Lancet*, vol. 383, No. 9925 (April 2014).

over the short and the medium term.[6] Morbidities associated with unsafe abortion have resulted in an estimated 5 million years of productive life lost.[7]

13. Gender inequality also hampers poverty reduction and prosperity, and it limits the returns associated with the demographic dividends. Closing the gender gap in labour-force participation could increase the global gross domestic product (GDP) by nearly 12 per cent by 2030.[8] Important inputs to expanded women's labour-force participation — delayed marriage and childbirth and more education — are also central drivers of demographic transition.

14. Interventions in the area of population and development, including increased access to sexual and reproductive health, are essential for eliminating major barriers to poverty reduction and prosperity. This does not mean that these interventions on their own bring about poverty reduction and prosperity; doing so requires actions across sectors covered by the Programme of Action together with those of many other sectors. Yet without these investments, individuals, communities and societies will suffer as a result of the lost lives, health, capabilities, productivity and prosperity.[9]

III. Sustainable development policies and programmes

15. Many national programmes and policies are designed and delivered in response to changing age structures. These include national investments formulated to advance the goals and aspirations of the Programme of Action and, more recently, to spur achievement of the Sustainable Development Goals.

A. Dignity and human rights

16. The International Conference on Population and Development beyond 2014 review examined progress made in the shared commitment to human rights, non-discrimination and expanding opportunity for all. It highlighted examples of the ways in which poverty and inequality are barriers to many of these achievements. As age structures change, the realization of dignity and human rights necessitates different emphases, from modernizing school curricula to implementing social supports during the reproductive and older ages.

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[6] Joint United Nations Programme on HIV/AIDS (UNAIDS), *2006 Report of the Global AIDS Epidemic* (Geneva, 2006).

[7] Susheela Singh, "Hospital admissions resulting from unsafe abortion: estimates from 13 developing countries", *The Lancet*, vol. 368, No. 9550 (November 2006).

[8] Hillary Clinton, "Unfinished business for the world's women", *The Economist*, 20 November 2014. Based on Organization for Economic Cooperation and Development (OECD) projections of increased female labour participation in OECD Member States, see Angel Gurria, Secretary-General of the Organization for Economic Cooperation and Development, "Gender dynamics: how can countries close the ecoromic gender gap?" speech to the World Economic Forum Annual Meeting, Davos, Switzerland, 25 January 2013. Available from www.oecd.org/economy/genderdynamicshowcancountriesclosetheeconomicgendergap.htm.

[9] Ralph Hakkert and others, *Impacts of Population Dynamics, Reproductive Health and Gender on Poverty* (New York, UNFPA, 2012).

17. The review devoted particular attention to the demographic importance of young people, who constitute an especially large proportion of the population in Africa and parts of Asia. The African Union road map on the demographic dividend, developed jointly with the Economic Commission for Africa, the African Development Bank, the planning and coordination agency of the New Partnership for Africa's Development, UNFPA and other United Nations partners and development agencies, puts forward a vision built on the need to invest broadly in young people. According to the road map, the "demographic dividend lens offers a strategic basis for focusing and prioritizing investments in people in general and youth in particular, in order to achieve sustainable development, inclusive economic growth and to build an integrated, prosperous and peaceful Africa, driven by its own citizens and representing a dynamic force in the international arena".

Generating youth employment in young countries

18. Young people around the world are disproportionately unemployed, underemployed or in highly vulnerable and insecure work. Two thirds of non-student youth in sub-Saharan Africa are in such situations. Just a third to a quarter of the jobs needed by young entrants into the labour market are created each year in sub-Saharan Africa, and many young people are unable to acquire the skills needed to compete for these jobs.[10] Young women in particular are at risk, often unable to enter the labour market owing to a lack of schooling, having to raise children, early or forced marriage or unplanned pregnancy.[11]

19. The African Development Bank is working closely with African Governments on an initiative entitled "Jobs for youth in Africa". A particular emphasis of the initiative concerns agriculture. In sub-Saharan countries, a significant majority of the population remains rural, and agriculture accounts for one third of the economic output and two thirds of the jobs. Amid growing economic inequality in these countries, a 2011 study suggested that a 1 per cent increase in agricultural per capita GDP had reduced the poverty gap five times more than a 1 per cent increase in GDP per capita in other sectors, an effect that was concentrated mainly among the poorest and most vulnerable populations.[12]

20. The initiative focuses on the expansion of youth employment in agriculture, such as through the rural microenterprise programme in low- to lower middle-income countries with large rural populations and a heavy reliance on agriculture. The programme emphasizes capital access, skills training and mentorship for agriculture-based microenterprises, focusing on young women with less than a secondary-level education. Young people receive business training and, on the basis of business plans submitted, seed capital. Given the challenges of land access for youth, gaps in existing value chains, and crops that require limited land will be primary focuses. The programme will include support to young people for becoming

[10] African Development Bank Group, "Bank Group's strategy for jobs for youth in Africa, 2016-2025" (May 2016).

[11] D. Schensul, K. Weny and R. Snow, "Foundations for the future", UNFPA input to the mid-term review of the Istanbul Programme of Action.

[12] African Development Bank Group, "Bank Group's strategy for jobs for youth in Africa", p. 17 (see footnote 10 above).

suppliers for small and medium enterprises, to encourage opportunities in the informal economy and pathways to more formal work.[13]

Policies that are flexible and responsive to age structure change

21. Rapid demographic transition and resulting rapid age structure change require flexible and adaptive policies. The Government of China, over the past 30 years, has structured policy around large proportions of children and young people who then moved into their adult years while being followed by smaller cohorts, driven by a rapid decline in fertility and significant gains in life expectancy. In 1982, people under 25 years of age and over age 60 accounted for 54 per cent and 7.3 per cent of the population, respectively. By 2010, those figures were 33.5 per cent and 13.2 per cent, respectively. It is projected that they will be near even — at about 25 per cent — for each age group in 2030.

22. China instituted nine-year compulsory education in 1986, driving an increase in the literacy rate from 77.2 per cent in 1982 to 96 per cent in 2010. Subsequently, with the success of those investments and a shift in age structure towards older youth and working-age people, China focused its investments on occupational education to develop skills in industrial development and to support young people in finding work in an evolving labour market.

23. A 2011-2020 development plan for children in China emphasizes health and education and includes curriculum-based sexual health education, an area in which UNFPA China is working with the Ministry of Education. The initiative entitled "Healthy China 2030" includes sexual health and sexual safety education and interventions, to reduce unintended pregnancies and sexually transmitted infections.

24. On the whole, these investments have involved shifting the emphasis since the age structure has changed in concert with the socioeconomic context, with continued emphasis on young people even as rapid ageing progresses. Ensuring a lifelong perspective on investment supports the realization of a second demographic dividend among ageing populations, which begins with better outcomes among young people.

Support for older persons

25. Older persons make up the fastest-growing age group in the global population, with projections suggesting that their numbers will more than double by 2050, at which point there will be more people 65 years of age and older than younger than age 15. More than two thirds of older persons live in developing countries.[14] Gender is a central consideration in ageing programmes; because of the difference in the life expectancy of men and women, most older persons are women. In addition, women generally bear much of the responsibility for the care of older persons within families and households.

26. Poverty-reduction and social-protection programmes for older persons receive significant attention, especially as societies age and older persons live longer and healthier lives. With increased population mobility and urbanization, and fewer

[13] Ibid., p. 18.

[14] United Nations, "Population ageing and sustainable development", *Population Facts*, No. 2014/4/Rev.1 (October 2015).

intergenerational households,[15] countries are seeing the provision of household-based social supports grow more challenging. A review of Asian countries showed high proportions of the population in several countries expecting social supports in old age to come primarily from personal savings and the State.[16]

27. Policy priorities for pensions have revolved around three key concepts: coverage, or the breadth of pension systems; adequacy, or the extent of the support that the pension systems provide to individuals and households; and sustainability, or how the pensions are financed over the short, medium and long term. As macroeconomic, social and political circumstances change, the relative balance of these three priorities changes as well.[17]

28. Recently, the focus in Latin America has been on pension adequacy. In Argentina and Chile, for example, there have been increases in benefits. In Colombia, 22 per cent of older adults live in poor households, in particular women, who spend a significant majority of their time in unpaid domestic work.[18] More than 40 per cent of those 60 years of age and older in Colombia are at a wealth level classified as "low" or "lower". The country has spent a decade implementing its "Red Unidos" strategy, a network of social protection against extreme poverty that targets 1.5 million households in poverty, providing State services to the most vulnerable families. A Red Unidos priority is to ensure that older persons and those with permanent disabilities have their own income. In 2015, the results included 13,245 older persons gaining literacy; 110,882 households being made aware of supports for interfamily and sexual violence; and 11,432 spaces generated for dialogue, conflict resolution and family cohabitation.

29. In the Eastern European and Central Asian regions, several countries have passed laws and enacted policies on discrimination, abuse and exclusion relevant to older persons. In 2012, the Republic of Moldova passed the Law on Equality, which focuses on preventing discrimination and ensuring equality and specifically mentions older persons in its article 1.[19] Kyrgyzstan passed a law in 2003 on the social-legal protection of the victims of family abuse, which includes specific provisions for older persons.[20] Eight of the twelve countries in the region that provided information for the World Health Organization (WHO) *Global Status Report on Violence Prevention 2014* reported that they had written legislation against elder abuse that was fully or partially implemented. Coverage of

[15] Albert Esteve, "Global trends in intergenerational coresidence", presentation at the United Nations expert group meeting on changing population age structures and sustainable development, New York, October 2016.

[16] Rafal Chomik, "Population ageing and social security in Asia", presentation at the United Nations expert group meeting on changing population age structures and sustainable development, New York, October 2016.

[17] Rafael Rofman, "Ageing and social security in Latin America", presentation at the United Nations expert group meeting changing population age structures and sustainable development, New York, October 2016.

[18] *Envejecimiento y Vejez en Colombia*, Encuesta Nacional de Demografía y Salud 2010 (Profamilia, 2013).

[19] Gender-Centru and HelpAge International, "Discrimination against older women in Moldova" (June 2013).

[20] UNFPA and HelpAge International, "Overview of available policies and legislation, data and research, and institutional arrangements relating to older persons: progress since Madrid" (New York, June 2011).

programmes to prevent elder abuse is more limited, however; Belarus and Albania are the only countries in the region to launch large-scale campaigns, that is, those reaching at least 30 per cent of target population.

30. Policies and programmes for older persons are also vital in countries with young age structures, where life expectancies are increasing dramatically. Ghana has implemented a number of interventions in support of older persons as part of the Madrid International Plan of Action on Ageing, 2002. These include a national fund on ageing; a national advisory committee on ageing to address issues faced by older persons; membership cards for priority access to services; access to free government medical services for those over 70 years of age; and provisions within the national gender policy for equity with regard to access by women to productive resources.

Addressing low fertility

31. In some countries, fertility levels have dropped to below, or even considerably below, the replacement level. There are many intersecting factors associated with below-replacement fertility, and a recent in-depth review by the Population Division of the Department of Economic and Social Affairs examined these factors in 18 countries that have experienced or continue to experience low fertility.[21] Perhaps the most consistent theme running through the case studies was that low fertility persists in middle-income and wealthier countries, where women and households face major challenges in balancing educational and career aspirations with having and caring for children.

32. In the labour market, flexibility was the key factor in limiting the decline of fertility, including the availability of part-time work and the ability to return to work after pregnancy and child-rearing. Affordable and accessible child care or, in some settings, the presence of extended family, enables women to return to work or school after childbearing. The same is true of tertiary education — the extent to which higher-education systems allow women to return and are affordable, as well as decisions by couples and resources for education, shape whether women can continue their education after breaks for childbearing.

33. A key question is the extent to which government policies and programmes can have a direct impact on fertility. In some cases, such as in the Netherlands and Norway, fertility has remained stable, at just below replacement, without direct efforts to increase it, likely due to a combination of generous social safety net policies — including housing supports, maternity and paternity leave, financial support for child care and highly subsidized education through tertiary levels — and significant workplace flexibility for women.[22] Other countries have pursued direct efforts to increase fertility from below-replacement levels, including through financial incentives. However, where these incentives are small in comparison with the costs associated with raising children, however, they have not produced significant changes in fertility levels.

[21] United Nations, "Cross-cutting issues and policies in countries experiencing low fertility", Policy Brief, No. 1 (2015).

[22] Ibid., "How has the Netherlands managed to sustain near-replacement fertility?", Policy Brief, No. 12 (2015).

34. Migration generally has a small impact on total fertility rates, in part because the fertility patterns of migrants gradually become consistent with those of the women in the destination country.[21] In some cases, for instance in the United States, migration can have a significant but temporary effect because of the concentration of migrants in reproductive ages; recent migrants may have higher fertility, but over a longer time horizon their fertility rates are closer to the national median in their destination country.[23]

35. Much research and experience suggest that policies that seek to bypass or go against individual fertility desires and choices are both counter to the Programme of Action and of limited impact. More effective policies focus on increasing well-being and making it easier for women and couples to have their desired number of children, with particular emphasis placed on gender equality, support for education and reconciliation of work and family life.[24] These policies return significant social and economic benefits regardless of their impact on overall fertility levels.

36. Part of supporting women and couples having the number of children they desire, an important part of sexual and reproductive health and reproductive rights, is addressing infertility. A recent WHO review showed that, among women 20 to 44 years of age who had been exposed to the risk of pregnancy, 1.9 per cent were unable to attain a live birth. Of the women who had had at least one live birth and were exposed to the risk of pregnancy, 10.5 per cent were unable to have another child.[25] An earlier review of developing countries showed 186 million women experiencing childlessness despite five years of attempting a pregnancy or a live birth, pointing out that while many couples face an unmet need for contraception, others struggle to have a child. People who experience infertility often face stigma or violence, and interventions and care for them have mostly been undertaken through private medicine and are therefore mostly inaccessible to the poor.[26]

B. Health

37. A hallmark of programmatic work on age structure and the demographic dividend involves investments in sexual and reproductive health and reproductive rights as a means of increasing the empowerment of women and girls and their ability to stay in school and pursue decent work. Yet the chance for millions of girls worldwide to realize their potential and contribute to development is derailed by child, early or forced marriage, unplanned pregnancies or poor access to health care, with spiralling impacts on educational attainment and labour-force participation.

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[23] Ibid., "What accounts for near replacement-level fertility in the United States?", Policy Brief, No. 19 (2015).

[24] Jana Vobecká, William P. Butz and Gerald Cirilo Reyes, Population Trends and Policies in the UNECE Region: Outcomes, Policies and Possibilities (UNFPA and International Institute for Applied Systems Analysis Policy Report, July 2013), p. 40.

[25] Maya N. Mascarenhas and others, "National, regional and global trends in infertility prevalence since 1990: a systematic analysis of 277 health surveys", *Public Library of Science (PLOS) Medicine*, vol. 9, No. 12 (December 2012).

[26] WHO, *Meeting to Develop a Global Consensus on Preconception Care to Reduce Maternal and Childhood Mortality and Morbidity* (Geneva, 2013).

38. Ill sexual and reproductive health has immediate consequences for the income of women and their households, and unwanted births tend to increase household poverty.[27] Approximately 16 million women 15 to 19 years of age give birth each year, or some 11 per cent of all births worldwide. In low- and middle-income countries, nearly 10 per cent of girls become mothers by the age of 16. Adolescents between 15 and 19 years of age represent 14 per cent of all unsafe abortions in low- and middle-income countries. Some 2.5 million adolescents have unsafe abortions every year, and adolescents are more seriously affected by related complications than are older women. Although adolescents 10 to 19 years of age represent 11 per cent of all births worldwide, they represent 23 per cent of the overall burden of disease (disability-adjusted life years) owing to pregnancy and childbirth. Pregnancy and childbirth are the leading cause of death among girls of this age in low-income countries.[28]

39. Access to sexual and reproductive health and reproductive rights, therefore, is not a sideline to inclusive and sustainable development; it is essential for the health of girls and women, their lifelong prospects and well-being, and their ability to contribute fully, at all ages, to sustainable development. When women and girls have access to sexual and reproductive health and their reproductive rights are promoted, in conjunction with education and gender equality, they also tend to have fewer children, resulting in the demographic transition (see A/69/62).

40. An increasing number of countries are recognizing these linkages and investing in expanding access to sexual and reproductive health as part of efforts to achieve a demographic dividend. The Sahel Women's Empowerment and Demographic Dividend regional initiative, the result of a joint initiative undertaken by the United Nations and the World Bank Group, is a response to a call made by the presidents of the six Sahel countries: Burkina Faso, Chad, Côte d'Ivoire, Mali, Mauritania and the Niger. These countries are prioritizing the demographic dividend because they face major human capital deficits coupled with rapid population growth. In addition, recurring conflicts, natural disasters and epidemics exacerbate poverty, perpetuate inequality and affect socioeconomic security and development in Sahel countries.

41. The initiative has three primary components: (a) generating demand for reproductive, maternal, neonatal and child health and nutrition services by promoting social and behavioural change and the empowerment of women and adolescent girls; (b) reinforcing the regional availability of reproductive, maternal, neonatal and child health and nutrition commodities and qualified health workers; and (c) reinforcing advocacy and dialogue at high levels and promoting policy development.

42. The social and behavioural change campaign is aimed at promoting the empowerment of women and adolescent girls by improving their knowledge; promoting voluntary family planning and access to and the use of reproductive, maternal, neonatal and child health and nutrition services and commodities; and ultimately increasing their educational and economic opportunities. The campaign

[27] Hakkert and others, *Impacts of Population Dynamics* (see footnote 9 above).

[28] WHO, *WHO Guidelines on Preventing Early Pregnancy and Poor Reproductive Outcomes among Adolescents in Developing Countries* (Geneva, 2011).

finances national programmes for the empowerment of women and girls, and to date has approved $73.4 million for programmes that focus on the economic empowerment of women, sexual and reproductive health and reproductive rights, and girls' education.

43. In 2013, UNFPA and the Swiss Agency for Development and Cooperation established a partnership to promote a healthy generation of adolescents and young people in southern Africa. The resulting programme, Safeguard Young People, is aimed at identifying and scaling up interventions for adolescents and youth, including improving policy and legal environments, strengthening integrated and youth-friendly HIV and sexual and reproductive health services, providing comprehensive sexuality education for in-school and out-of-school youth and ensuring meaningful youth participation and empowerment. The Programme prioritizes vulnerable communities within eight countries: Botswana, Lesotho, Malawi, Namibia, South Africa, Swaziland, Zambia and Zimbabwe.[29]

44. Between January and August 2016, more than 300,000 adolescents and young people were reached through social-behavioural change communication and comprehensive sexuality education programmes. Over the same period, nearly 40 million condoms were distributed to young people. A total of 7,767 stakeholders (Government officials, non-governmental organizations, community leaders and traditional leaders) received face-to-face training in comprehensive sexuality education by the end of August. More than 40 youth-led and youth-serving organizations had undergone capacity-building in 2015.

45. In 2015, UNFPA, with the University of Pretoria, conducted a review of laws and policies that affect adolescents and young people's sexual and reproductive health in eight Safeguard Young People programmes and 15 additional eastern and southern African countries. The review examined whether national laws and policies protect or impede the rights of adolescents and young people to access sexual and reproductive health, and whether these laws and policies are harmonized, contradict each other or have discrepancies that need to be addressed. This type of assessment provides a major contribution to monitoring target 5.6 of the Sustainable Development Goals through indicator 5.6.2.[30]

46. The assessment resulted in the development of a harmonized regional legal framework to be adopted by the Southern African Development Community (SADC) and subsequently by its member States. The resulting Model Law on Child Marriage acts as a yardstick and encourages Governments to be accountable for regional and international goals they have committed to. It is also an advocacy tool that assists policy makers and legislative drafters in addressing all the relevant areas in need of legislative reform without usurping the authority of national legislatures. The Model Law uses best-practice language that prevents loopholes in the law, and can be easily adopted or adapted by member States. The model law was developed through an extensive consultative process which culminated with its adoption by the SADC Development Community Parliamentary Forum in May 2016 during its General Assembly in Swaziland.[29]

[29] UNFPA, "Safeguard young people annual report, 2015".

[30] Indicator 5.6.2 is "number of countries with laws and regulations that guarantee full and equal access to women and men aged 15 years and older to sexual and reproductive health care, information and education, disaggregated by sex".

Information and education in Sustainable Development Goal target 3.7

47. Lack of access to education and information is strongly linked to ill sexual and reproductive health. For instance, globally only 34 per cent of young people can demonstrate accurate knowledge of HIV prevention and transmission. Furthermore, as is made clear in the International Conference on Population and Development beyond 2014 Framework of Actions, non-communicable diseases, and about 70 per cent of premature deaths among adults, are strongly associated with four behaviours that begin or are reinforced in adolescence: smoking, the harmful use of alcohol, inactivity and overeating or poor nutrition. Lifelong health education should begin with young people, both within school curricula and in concert with comprehensive sexuality education, as many life habits that affect long-term health are initiated and formed at young ages and are intertwined with aspects of identity formation and aspirations for adulthood (see A/69/62).

48. Comprehensive sexuality education is based on learning blocks that correspond to the evolving capacities of children as they get older. It builds skills that people use throughout their lives as they move from childhood to adolescence to adulthood.[31] Reviews of the efficacy of comprehensive sexuality education curricula show that those that emphasized gender and power were markedly more likely to reduce rates of sexually transmitted infections or unintended pregnancy than "gender-blind" curricula (see A/69/62). Evidence shows increased use of condoms and delayed sexual debut among young people who receive this education, which contribute to a reduction in the incidence of adolescent pregnancy.[32]

49. The HIV and AIDS Life Skills Education Programme in South Africa is designed to reduce young people's vulnerability to HIV infection and equip them with the knowledge and skills they need to make informed decisions about sexual behaviour. Its key dimensions include training for master trainers and teachers, peer education and care and support for people living with HIV. The themes of the curriculum include substance abuse, HIV/AIDS, sexual and reproductive health, gender equity and non-discrimination, peer pressure and assertiveness.

50. In addition, the Integrated School Health Programme, introduced in October 2012, is aimed at strengthening holistic school health services for learners in South Africa. By providing a more comprehensive package of services, it tries to address conditions that contribute to morbidity and mortality, as well as barriers to learning, among students. This multisectoral programme, jointly led by the Department of Health and the Department of Basic Education, enables students to access a variety of health services within the schools thanks to mobile outreach and strengthened referrals to community health facilities. Each student is assessed individually and regularly by a school health team led by a professional nurse. The nurse and the team provide sexual and reproductive health services, including contraception and HIV counselling and testing, where appropriate. The Integrated School Health Programme has strengthened the capacities of the primary health-care outreach

[31] More technical information on the components of comprehensive sexuality education can be found in UNESCO and others, *International Technical Guidance on Sexuality Education: An Evidence-Informed Approach for Schools, Teachers and Health Educators* (Paris, 2009).

[32] Virginia A. Fonner and others, "School-based sex education and HIV prevention in low- and middle-income countries: a systematic review and meta-analysis", *PLOS One*, vol. 9, No. 3 (March 2014).

teams, community health workers and Department of Basic Education district coordinators.[33]

51. Guatemala is implementing a programme, "Abriendo Oportunidades", to address high levels of adolescent pregnancy, especially among poor and less-educated girls living in rural communities. The programme, implemented by UNFPA and the Population Council, has reached 8,000 girls 8 to 19 years of age in 100 communities and has built a network of 100 young indigenous mentors. A quantitative household-level evaluation conducted in 36 communities documented that Abriendo Oportunidades has led to positive changes for disadvantaged girls, including sustained school enrolment, a greater desire among programme participants for continuing education, delayed marriage and a desire to delay childbearing.[33]

Age-based expansion of universal health coverage

52. Universal health coverage is a key component of Sustainable Development Goal 3, under target 3.8. As clearly stated in the framework of actions for the International Conference on Population and Development beyond 2014, "the importance of closely linking sound evidence on population dynamics, including population health data and factors that limit access to health care, to universal health-care planning cannot be overemphasized". Age structure and the targeting of relevant services is an important part. Also addressed in the framework of actions is the need to identify core components of essential rights-based sexual and reproductive health services, including through progressive realization of universal health coverage.

53. In 2004, the National Ministry of Health in Argentina initiated a programme, "Plan Nacer", aimed at improving health coverage and outcomes under the Millennium Development Goals. Plan Nacer was considered the primary means to fully implement Argentina's universal health coverage. Limits in access to coverage were evident in differential infant mortality rates within the population ostensibly covered under the country's universal health coverage. Plan Nacer focused on enrolment, access and quality through progressive expansion that was eventually structured around the differential needs of groups defined by age and gender. In 2012, the programme "Programa Sumar" (under Plan Nacer) focused specific attention on adding new age groups and appropriate services for children under 11 years of age, adolescents under 19 years of age and women between 20 and 64 years of age; in 2015, men 20 to 64 years of age were included.[34] With each age-specific expansion, corresponding tracers were added, as shown in figure IV.

[33] UNFPA, *UNFPA Operational Guidance for Comprehensive Sexuality Education: A Focus on Human Rights and Gender* (New York, 2014).

[34] People 65 years of age and older receive coverage through the social security system.

Figure IV
Programa Sumar tracers: performance indicators used to evaluate provincial systems

Area	*Indicator*
1. Early pregnancy care	Pregnant women seen before week 13
2. Pregnancy follow-up	At least 4 prenatal check-ups for pregnant women
3. Effectiveness of neonatal care	Survival for 28 days of children with birthweight between 750 and 1,500 grams
4. Follow-up of children under 1 year of age	At least 6 check-ups before the first year of age, as scheduled
5. Intraprovincial equity in the follow-up of children under 1 year of age	Measures equality in terms of health follow-up of children under 1 year of age within different regions of the same province
6. Capability to detect congenital heart disease in children under 1 year of age	Children under 1 year of age with congenital heart disease diagnosis reported to national coordinating referral centre
7. Follow-up of children between 1 and 9 years of age	At least 9 check-ups between 1 and 9 years of age, as scheduled
8. Immunization coverage at 24 months	Children at 2 years of age who received quintuple and polio vaccines between 1.5 and 2 years of age
9. Immunization coverage at 7 years of age	Children at 7 years of age who received triple or double viral, triple and polio vaccines between 5 and 7 years of age
10. Follow-up of adolescents between 10 and 19 years of age	At least one annual check-up between 10 and 19 years of age
11. Promotion of sexual and/or reproductive health rights	Adolescents between 10 and 19 years of age and women up to 24 years of age who take part in sexual and/or reproductive health workshops
12. Prevention of cervical cancer	Women between 25 and 64 years of age with advanced cervical lesions or carcinoma diagnosed in the past year
13. Breast cancer care	Women up to 64 years of age with breast cancer diagnosed in the past year
14. Evaluation of the process of care in cases of maternal and infant death	Evaluates the process of care in cases of maternal and infant death

Source: Available from http://phcperformanceinitiative.org/plan-nacerprograma-sumar-measurement-ensure-effective-universal-health-coverage.

54. Results from the expansion of coverage in Argentina show both an increased use of health services and an increased use under the universal coverage scheme.

with the gap between the two narrowing over the past five years. A key lesson learned from this effort was the importance of good data, including the selection of the appropriate tracer indicators and reliable baselines that could be tracked continually.

C. Place and mobility

55. Many important links exist between place and mobility and age structure, including through urbanization, internal and international migration, and displacement. For instance, in the outcome document of Habitat III, the New Urban Agenda, Member States committed to harnessing the urban demographic dividend by promoting the access of young people to education, skills development and employment to achieve increased productivity and shared prosperity in cities and human settlements. The New Urban Agenda also recognized the importance of urban planning that supports the rights, needs and aspirations of older persons.[57]

56. Global and national supports for displaced persons and refugees are a priority focus for age-focused interventions, given that the world is experiencing the highest numbers of internally displaced and refugee populations ever owing to conflict. Supporting adolescents and youth is especially important. Traumatized, constrained by tradition, and torn from school, family structures and familiar social networks, they can get lost in the crowd in a refugee camp or a disrupted community.[58]

57. Jordan has been the destination for well over 600,000 refugees. This massive influx resulted in the opening of the Za'atari refugee camp in 2012. As at 6 July 2015, the camp sheltered a total of 81,405 residents, including 22,080 girls and 23,520 boys. Although more than 1,400 small businesses have flourished there, refugees in Za'atari have scarce access to income-providing activities and very limited educational and recreational opportunities, which has a huge impact on the day-to-day experiences and future prospects of adolescents and youth. The 2015 regional response plan highlighted that only 8,541 individuals of the planned 111,000 (8 per cent) had participated in employment-assistance or income-generation activities. Only 31,681 individuals of the planned 177,000 (18 per cent) had participated in technical or vocational training, literacy initiatives, or life-skill training.

58. Protection actors are working with the Government of Jordan to identify opportunities and programmes for Syrian refugees that promote resilience, empowerment, self-reliance and positive coping strategies in both camp and non-camp settings. Within this aim, programmes that involve youth 16-24 years of age and women as active participants are particularly important. Life in crisis zones implies the absence of role models, the breakdown of social and cultural systems, personal trauma, including, very often, the loss of family members, exposure to violence, and the disruption of school, friendships and personal dreams. In this context of turbulence and uncertainty, the creation and promotion of safe areas that

[57] Related resources and programmes can be found in WHO, *Global Age-Friendly Cities: A Guide* (Geneva, 2007).

[58] UNFPA, "Adolescent girls in disaster and conflict: interventions for improving access to sexual and reproductive health services (New York, 2016).

involve the participation of youth is essential to addressing the many concerns of young people, in particular those pertaining to sexual and reproductive health matters in emergency settings.

59. UNFPA has partnered with the organization Questscope in Jordan to establish Y-Peer Jordan, a network of volunteers inside the refugee camp focusing in particular on adolescent sexual and reproductive health and reproductive rights. The networks created around these cadres of volunteers involve the community in a participatory manner, which gives a sense of purpose to the daily lives of young refugees. Preliminary results have been promising. A core group of young volunteers has been trained and assigned tasks to carry out in the camp focusing on youth and adolescent mobilization and case management. A network linking youth among different organizations has been established to reinforce peer-to-peer mechanisms and cope with turnover among volunteers. Peer-to-peer methodology prioritizes the participation of adolescents and youth in the design and implementation of activities. As a result, it is one of the few initiatives in Za'atari that is entirely led by young people.

D. Governance and accountability

60. The field of population and development and the Programme of Action have been major drivers of expanding data systems and strengthening the evidence base for decision-making. At the centre of the 2030 Agenda and its indicator framework is the need to significantly expand the effective use of national and subnational population data. Core demographic data — census and civil registration and vital statistics, together with household surveys — are still underutilized in situation analysis and decision-making.

61. Some countries are unable to generate core demographic data owing to conflict. In Afghanistan, the Government is partnering with UNFPA and the Flowminder Foundation to expand the national census, which could be carried out in only a subset of provinces owing to security risks. Using satellite imagery and existing household surveys, the team has generated algorithms that enable the estimation of households in areas with satellite imagery, but no household data. This exercise provides a more extensive overall count of the population and estimates of broad age groups by sex, which are vital to targeted programming.

62. The *Global Monitoring Report 2015/2016*[17] examined the links between age structure, demographic transition and development goals, bringing together relevant data and categorizing countries according to their age structure and change. In close partnership with national Governments, UNFPA has built on this work to develop national demographic dividend profiles for tracking current and projected age structure and data on human capital. Growing capacity in use of census data is allowing expansion into subnational mapping and projections of age structure. Where the data allow, countries have undertaken analyses to generate national transfer accounts, and interest in tracking intergenerational transfers appears to be increasing.

[17] World Bank Group, *Global Monitoring Report 2015/2016: Development Goals in an Era of Demographic Change* (Washington, D.C., 2016).

64. In Nepal, UNFPA has conducted an analysis on key subnational disparities among the needs of young people. Using the 2011 Nepal Integrated Public Use Microdata Series census data to examine population age structure at the district level, a demographic dividend index was constructed on the basis of the "EEE" framework of empowerment, education and employment investments needed to advance prospects for a demographic dividend. Forward-looking simulations have illustrated the impact of different policy scenarios to promote development.[38]

64. In a more expansive exercise, the Government of Zambia has partnered with UNFPA to generate district-level development indicators to inform the forthcoming seventh national development plan. Attention to age structure at subnational levels showed urban clustering of young adults and allowed the generation of both proportionate risks and actual numbers of young people at risk within each district of events, such as child, early and forced marriage; adolescent pregnancy; school dropout; and unemployment. Drawing on the 2010 Population and Housing Census, 2011-2035 population and demographic projections and the Health Management Information System, the analysis provided the basis for a meeting on national investment, including policies and programmes to realize the demographic dividend in Zambia, in December 2016.

E. Sustainability

65. The world faces many urgent acute and chronic environmental concerns, in particular climate change, given its enormous disruptive effects on prosperity and people's ability to escape and stay out of poverty. Age structure has important implications for the climate-related vulnerability and resilience of societies, both nationally and locally, and has become part of how countries diagnose and address a wide range of risks. Children and older persons experience heightened yet differential vulnerability, both in general and depending on the specific type of hazard. For instance, research shows that 88 per cent of the global burden of disease related to climate change, such as vector-borne diseases, diarrheal and respiratory disease, falls on children.[39] In heat waves in the United States and France, impacts on older persons have been greater due to social isolation, in particular in urban areas, which are associated with lack of access to extended social networks and family support structures.[40] Disproportionate poverty among children and older persons also produces greater vulnerability.

66. The Information for Risk Management Index, a widely used global approach to assessing risk, is currently being applied for humanitarian, climate adaptation and disaster risk reduction uses. The Index incorporates vulnerable groups, including both children and older persons. UNFPA has worked with Governments to incorporate population into national and local climate change adaptation planning,

[38] Xuejun Zhang, Edilberto Loaiza and Rachel Snow, "Sub-national estimates of human capital indicators: localizing investments for the demographic dividend", *African Population Studies*, vol. 30, No. 2 (2016).

[39] Perry E. Sheffield and Philip J. Landrigan, "Global climate change and children's health: threats and strategies for prevention", *Environmental Health Perspectives*, vol. 119, No. 3 (March 2011).

[40] Jon C. Semenza and others, "Heat-related deaths during the July 1995 heat wave in Chicago", *The New England Journal of Medicine*, vol. 335, No. 2 (July 1996).

including age-specific targeting in exposed areas. Depending on the context and the type of hazard, the dependency ratio (the ratio of children plus older persons to those in between) at the local level has been used as an input to risk assessment in Bolivia (Plurinational State of), Indonesia and Malawi. The results are linked with health infrastructure data to evaluate the access of the vulnerable group to health services.[41]

IV. Conclusion

67. In his report on the framework of actions of the International Conference on Population and Development beyond 2014, the Secretary-General provided a proposal for an integrated approach to sustainability, driven by a set of pathways cutting across all of the pillars, with a foundation in ensuring dignity and human rights for all. The second pathway is investment in lifelong health and education, especially for young people and sustained across the life course. He stated that lack of education and ill health were the most common risk factors and manifestations of poverty, curtailing economic growth and human well-being and limiting the capability of both individuals and societies to innovate and thrive in a changing world". He also showed that the outcomes of policies and programmes during periods of young age structure greatly influenced long-term development trajectories, including as countries experienced ageing.

68. Age structural change brings concerns for many, in particular that there will not be sufficient jobs and services for large numbers of young people, or that economies may suffer as the number of older persons increases. These concerns can be especially pronounced when age structures change rapidly. Age structure change reflects great achievements, including broader access to education, gender equality and sexual and reproductive health, and reductions in mortality among children, mothers and older persons. Although the drivers are positive, the cost of inaction, of not accounting for and adapting to age structure changes, will be high, as demographic trends can exacerbate existing gaps in development if people are concentrated in ages that lack services and investments. This mismatch produces long-term legacies of missed human capabilities and lost chances for development.

69. The present report has highlighted policies and programmes in place in diverse countries that have been successful in accounting for the age of beneficiaries and the age structure of the population, with results that spur demographic dividends associated with both youthful and ageing societies. With good data and effective research, the sharing of experiences across countries and proactive policies and programmes, age structure changes can be a critical part of achieving poverty reduction, prosperity and broad-based sustainable development.

[41] George Martine and Daniel Schensul, eds., *The Demography of Adaptation to Climate Change* (UNFPA, International Institute for Environment and Development and El Colegio de México, 2013); and Wahyu Mulyana and others, *Urbanisation, Demographics and Adaptation to Climate Change in Semarang, Indonesia* (London, International Institute for Environment and Development and UNFPA, 2013).